



**CONTRACT DOCUMENTS &
TECHNICAL SPECIFICATIONS**

PWC 2425072

**COATING REPAIRS TO THE 1 MG CLINTON ROAD
ELEVATED WATER STORAGE TANK**

ISSUED FOR BID

APRIL 14, 2025



**Fayetteville Public Works Commission
Administrative Building
955 Old Wilmington Road
Fayetteville, NC 28301**

TABLE OF CONTENTS

SECTION A – PROJECT SPECIFICS

General

Advertisement for Bids

00100 – Instructions to Bidders

Bid Submittal Documents

Bid Schedule – Performance and Delivery

Bid Checklist

00300 – Bid Pricing Form

Contractor Qualification Forms

Bid Supplemental Forms and Attachments

Minority, Women, Disadvantaged Business Enterprise (MWDBE) Program

MWDBE Program Forms

SLS/MWDBE Disclosure Form

SECTION B – CONTRACT EXECUTION DOCUMENTS

Notice of Award

Acceptance of Award

Construction Agreement

PWC General Conditions

Contract Supplemental Forms and Attachments

Notice to Proceed

SECTION C– TECHNICAL SPECIFICATIONS

APPENDICES

Appendix A – Remedial Repair Detail Drawings

Appendix B– Caldwell Shop Drawings

Appendix C – Construction Drawings

SECTION A – PROJECT SPECIFICS GENERAL

***** THIS PAGE WAS INTENTIONALLY LEFT BLANK *****

ADVERTISEMENT FOR BID
FAYETTEVILLE PUBLIC WORKS COMMISSION
COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK

Cumberland County
North Carolina

Pursuant to N.C.G.S 143-129, sealed bids are solicited and will be received at Fayetteville Public Works Commission, Administration Building, Conference Room 107, 955 Old Wilmington Road, Fayetteville, NC 28301, until **2:00 p.m., EST Wednesday, May 14, 2025**, at which time they will be publicly opened and read.

The 1,000,000-gallon capacity hydropillar elevated water storage tank is located at 2510 Clinton Road, Fayetteville, NC 28312. The Work includes the surface preparation and painting of all exterior surfaces and all interior dry portions of the tank for the Fayetteville Public Works Commission ("PWC"). Bidders should refer to the attached Technical Specifications and the Remedial Repair Detail Drawings.

The foregoing description shall not be construed as a complete description of all work required. All work shall be done in accordance with PWC technical specifications and standard contract terms.

A **NON- MANDATORY** pre-bid meeting will be held at **10:00 a.m., EST Tuesday, April 29, 2025**, in the Administration Building, Conference Room 107, Fayetteville Public Works Commission, Administrative Building, 955 Old Wilmington Road, Fayetteville, NC 28301. Representatives of the Owner and Project Engineer will be available to answer questions.

Questions will be fielded at the pre-bid meeting and all prospective bidders are required to attend the meeting. Individual telephone inquiries are prohibited. PWC assumes no responsibility to fully inform absentees of clarifications not issued by addendum.

Bids must be enclosed in a sealed envelope addressed to Shelby Lesane, Procurement Advisor II, Fayetteville Public Works Commission, 955 Old Wilmington Road, Fayetteville, North Carolina 28301. The outside of the envelope must be marked **SEALED BID: COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK** and shall indicate the name, address and state license number of the bidder. Bids shall be submitted on the printed forms, or exact copies thereof, contained in the Contract Documents.

Each bid shall be accompanied by a bid bond of five percent (5%) of the bid executed by a surety company licensed under the laws of North Carolina to execute the Contract in accordance with the bid bond and upon failure to forthwith make payment, the surety shall pay the obligee an amount equal to the amount of said bond. Said deposit shall be retained by the Owner as liquidated damages in event of failure of the successful bidder to execute the Contract within ten (10) days after the Notice of Award or give satisfactory surety as required by law.

Performance and Payment Bonds are required in the amount of 100% of the Contract amount and shall be furnished by the Contractor.

All Contractors are notified that North Carolina Statutory provisions as to licensing of Contractors will be followed as applicable in receiving and evaluating bids and in reading and awarding the Contract (Chapter 87 of the North Carolina General Statutes).

The license classification shall be:

Part 1:	Public Utilities (Water and Sewer)	-	Unlimited
	Unclassified	-	Unlimited

Plans and Specifications including Contract Documents will be available online for viewing and downloading on or about **Monday, April 14, 2025** on the PWC Procurement website at <https://www.faypwc.com/purchasing>. In addition, the documents will be available from the Fayetteville State University Construction Resource Office (FSU CRO) at <https://www.uncfsu.edu/academics/colleges-schools-and-departments/broadwell-college-of-business-and-economics/outreach-centers/construction-resource-office>. In collaboration with the North Carolina Institute of Minority Economic Development, the FSU CRO offers services and support to help small, minority, veteran, and women-owned businesses identify and compete for construction-related projects.

At the FSU CRO, potential bidders may:

- Research, view and print project drawings to scale free of charge;
- Use available software to prepare their bid; and
- Receive certification and pre-qualification assistance.

Please email the FSU CRO to make an appointment: fsucro@uncfsu.edu

Plans and Specifications are also being furnished to ISQFT (www.isqft.com) for online posting. Purchase of the documents is not required to bid.

Fayetteville Public Works Commission reserves the right to reject any or all bids for any reason determined by PWC to be in its best interest, or to award the bid to the lowest responsible bidder or bidders, taking into consideration quality, performance, and the time specified in the bids for the performance of the contract.

The bidder to whom the contract may be awarded must comply fully with the requirements of North Carolina General Statutes Section 143-129, as amended.

No bids may be withdrawn after the scheduled Bid Opening for a period of ninety (90) calendar days.

FAYETTEVILLE PUBLIC WORKS COMMISSION
Nikole Bohannon
Procurement Manager

00100 - INSTRUCTIONS TO BIDDERS

FAYETTEVILLE PUBLIC WORKS COMMISSION

COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK

A. DEFINED TERMS

Terms used in these Instructions to Bidders are defined in the Definitions and Terminology sections of PWC General Conditions.

B. COPIES OF BIDDING DOCUMENTS

1. Complete sets of the Bidding Documents as stated in the Invitation to Bidders, may be obtained from the PWC Procurement Department.
2. Complete sets of Bidding Documents shall be used in preparing Bids. PWC assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

C. EXAMINATION OF CONTRACT DOCUMENTS, OTHER RELATED DATA, AND PROJECT SITE

1. Before submitting a Bid, each Bidder shall (a) examine the Contract Documents thoroughly, (b) visit the site and become familiar with the site and any local conditions that may in any manner affect the cost, progress, or performance of the Work, (c) be familiar with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work, and (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) give the PWC Procurement Advisor written notice of all conflicts, errors or discrepancies in the Contract Documents.
2. Bidders should consult the Specifications for the identification of those reports of investigations and tests of subsurface and latent physical conditions at the site or reports that otherwise may affect cost, progress, or performance of the Work which may have been utilized in the preparation of the Drawings and Specifications. PWC will make copies of such reports if available at the cost (non-refundable) of reproduction to any Bidder requesting them. These reports are not intended to constitute any explicit or implicit representation as to the nature of the subsurface and latent physical conditions, which may be encountered at the site or to constitute explicit or implicit representations as to any other matter, contained in any report. Such reports are not guaranteed as to accuracy or completeness and are not part of the Contract Documents. Before submitting a Bid, each Bidder will, at its own expense, make such investigations and tests as the Bidder may deem necessary to determine his Bid for the performance of the Work in accordance with the Contract Documents.
3. On request (minimum 48 hours advance notice), PWC will provide each Bidder access to the site to conduct such investigations and tests, as each Bidder deems necessary for submission of its Bid.
4. The lands upon which the Work is to be performed, right-of-way for access thereto, and other lands available for use by the Contractor in performing the Work are identified in the Contract Documents.

5. The submission of a Bid constitutes an incontrovertible representation by the Bidder that it has complied with every requirement of this Section and that the Contract Documents are sufficient in scope and detail to indicate and convey an understanding of all terms and conditions for the performance of the Work.

D. INTERPRETATIONS AND ADDENDA

1. All questions about the meaning or intent of the bid or Contract Documents shall be submitted in writing to Shelby Lesane, Procurement Advisor II, by email to procurement@faypwc.com. In order to receive consideration, questions must be received by Tuesday, May, 6, 2025 and time 5:00 p.m.. Any interpretations of questions so raised, which in the opinion of the Project Engineer require interpretations, will be issued by Addenda via email or posted online by the Owner and/or Project Engineer. An Addendum extending the Bid Opening date may be issued up to five (5) business days before the Bid Opening date. An Addendum withdrawing the Invitation for Bid may be issued any time prior to the Bid Opening date. The Owner and Project Engineer will not be responsible for oral interpretations or clarifications, which anyone presumes to make on their behalf.

Bidders are expressly prohibited from contacting any PWC official or employee associated with this project, except as noted above. Violation of this prohibition is grounds for the immediate disqualification of the bidder.

2. PWC may issue such additional Addenda as may be necessary to clarify, correct, or change the Contract Documents. Such Addenda, if any, will be issued in the manner and within the time stated in Paragraph 1 of this Section.
3. Each Bidder shall be responsible for determining that all Addenda issued by PWC have been received before submitting a Bid for the Work.
4. Each Bidder shall acknowledge the receipt of each Addendum on the Bid Form.

E. VENDOR REGISTRATION VIA ISUPPLIER

1. All vendors interested in doing business with PWC must register as a vendor through the iSupplier Portal using the link below. The iSupplier self-service portal enables vendors to have real-time access to information regarding purchase orders, invoices, and payments through a secure environment. Attach a copy of your W9 to your online registration.

<https://www.faypwc.com/isupplier-doing-business-with-pwc/>

F. QUALIFICATION OF CONTRACTORS

1. **Bidder Qualification Form** – The Bid package shall include the completed Contractor Qualification Form and all supporting documentation.
2. **Statutory Requirements** – The Bidder shall comply with all federal, state, and local statutes, regulations, and codes as they relate to the Project. Failure to comply with these requirements shall be considered a breach of Contract.
3. Contractor to provide utility references for similar projects completed by identified crews.

G. SUBSTITUTE MATERIAL AND EQUIPMENT

The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or required in the Specifications without consideration of possible substitute or "or-equal" items. The procedure for submittal of substitute or "or-equal" items for consideration is set forth in the PWC General Conditions.

H. CONTRACTOR'S LICENSE

1. No General Contractor shall engage in contracting work in the State of North Carolina unless it has been licensed under in accordance with North Carolina law.
2. Bidders are prohibited from contracting for, or bidding upon, the construction, removal, repair or improvements to or upon real property owned, controlled or leased by Fayetteville Public Works Commission without a North Carolina Contractor's License.
3. Each bidder shall indicate its North Carolina Contractor's License number on the bid envelope and the Bid Form.
4. License Classification shall be:
 - Public Utilities Water and Sewer: Unlimited
 - Unclassified: Unlimited

I. SUBCONTRACTORS

1. Contractor shall subcontract no more than 49 percent (49%) of the value of the Contract.
2. Each Bidder shall submit to PWC with its bid the List of Subcontractors, Suppliers, other persons, and organizations proposed for those portions of the Work for which such identification is required. If PWC, after due investigation has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, PWC may, before Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute without an increase in the Bid.
3. If the apparent Successful Bidder declines to make such a substitution, PWC may award the Contract to the next lowest responsive, responsible Bidder that proposes to use acceptable Subcontractors, Suppliers, and other persons, and organizations. The declining to make requested substitutions will not constitute grounds for sacrificing the bid security of any Bidder. If PWC does not make written objection to a Bidder's list of Subcontractors, Suppliers, other persons, or organizations prior to giving Notice of Award, the list will be considered acceptable, subject to revocation as provided in the PWC General Conditions.

J. MINORITY, WOMEN, DISADVANTAGED BUSINESS ENTERPRISE (MWD BE) PROGRAM / SMALL LOCAL SUPPLIER (SLS) PROGRAM

1. PWC is committed to promoting the utilization of Minority, Women, and Disadvantaged Businesses in PWC's geographical statistical area (GSA) by providing equal opportunity for participating in all aspects of PWC's contracting and procurement programs. The GSA consists of NCDOT division areas 3-8, and 10. PWC is also committed to promoting the utilization of small, local businesses in the Fayetteville Metropolitan Statistical Area (MSA) by increasing opportunities for those businesses to participate in PWC procurements. The

MSA consists of Cumberland County, Hoke County, and Harnett County.

2. Bidders must report their efforts to engage MWDBEs, Historically Underutilized Businesses (HUBs), and Small Local Suppliers for each project, regardless of specific project requirements.
3. Bidders shall submit the MWDBE Affidavits A or B, & E provided within Attachment A with their bid submittal. The Affidavits shall be signed and notarized.
4. In accordance with PWC's MWDBE Program, the goal shall be to award four percent (14%) of the total contract dollars to MBE firms and four percent (11%) to WBE firms. A complete copy of PWC's MWDBE Program is available for inspection at PWC Procurement Department.
5. Bidders are encouraged to document good faith efforts and subcontractor utilization in the MWDBE Affidavits C or D at the time of bid submission, though it is not mandatory. If these efforts are not included, PWC's Program staff will contact the lowest responsive bidder to request documentation, which must be provided within 24 hours or by the next business day.
6. NCDOT Disadvantaged Business Enterprise (DBE) and NC Department of Administration (DOA) Historically Underutilized Business (HUB) firms with current certifications are acceptable for listing in the bidder's submittal of MWDBE participation and will be considered to meet any necessary contract goal. Firms that are certified through NCDOT are listed in the "Vendor Directory" which can be accessed through the following: <https://www.ebs.nc.gov/VendorDirectory/default.html>

Firms that are certified through NC DOA are listed at the "Vendor Search" which can be accessed through the following link: <https://evp.nc.gov/vendors/vendorsearchadvanceform/?id=d98aa5d6-0d57-ee11-be6e-001dd804e775>
7. The Bidder is strongly recommended to attend the Pre-Bid Meeting, as important information will be reviewed.

K. SUBMISSION OF BIDS

1. All Bidders shall use the enclosed Bid Forms, or exact copies thereof, in submitting their bid prices. Failure to provide full and complete Bid Forms using the form provided herein will result in a bid being deemed non-responsive.
2. PWC will not accept modified Bid Forms, oral Bids, or Bids received by telephone, email, or telecopier (FAX machine) for this Bid.
3. All prices must be F.O.B. delivered to the point as indicated by this Bid. PWC will grant no allowance for boxing, crating, or delivery unless specifically provided for in this Bid.
4. The Bid Form must be completed in black ink. Black or blue pen ink is acceptable if handwritten. Discrepancies between amounts shown in words and amounts shown in figures will be resolved in favor of the amounts shown in words. Discrepancies in the

multiplication of units of Work and the unit prices will be resolved in favor of the correct multiplication of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

5. Bid submittals sent by mail should be registered mail. The sealed Bid, marked as indicated above, should be enclosed in an additional sealed envelope similarly marked and addressed to:

Fayetteville Public Works Commission
Attn: Shelby Lesane, Procurement Advisor II
955 Old Wilmington Road
Fayetteville, North Carolina 28301

6. Mark the envelope in the lower left-hand corner with the project title, hour and due date of Bid, and the Bidder's North Carolina contractor registration number.
7. Bids sent by mail and arriving after the time for the opening of Bids shall not be considered valid Bids. In such instances, the Bidders shall have no claim against PWC.
8. All items contained in the Bid Checklist shall be completely filled out and submitted with the bid. Failure to submit any of the items requested with the Bid Form may be just cause for rejection of the Bid by PWC.
9. All erasures, insertions, additions, and other changes made by the Bidder to the Bid Form shall be signed or initialed by the Bidder. Bids containing any conditions, omissions, erasures, alterations, or items not called for in the Bid, may be rejected by PWC as being incomplete or nonresponsive.
10. The Bid Form must be signed in order to be considered. If the Bidder is a corporation, the Bid must be submitted in the name of the corporation, not simply the corporation's trade name. In addition, the Bidder must indicate the corporate title of the individual signing the Bid.
11. The Bid Form, the Bid security, if any, and any other documents required, shall be enclosed in a sealed opaque envelope. Any notation or notations on the exterior of the envelope purporting to alter, amend, modify, or revise the bid contained within the envelope shall be of no effect and shall be disregarded.
12. All Bids received in the Procurement Department by the deadline indicated will be kept sealed until the time and date of the Bid Opening.
13. All late Bids shall be returned unopened to the sender.

L. BID BOND

1. Each Bid shall be accompanied by an acceptable Bid bond in the amount of five percent (5%) of the Bid amount, and made payable to Fayetteville Public Works Commission, North Carolina.

2. The Bid bond is a guarantee that if the contract is awarded by PWC to the Bidder, the Bidder shall enter into the contract with PWC for the work mentioned in this Bid or forfeit the Bid bond to PWC, not as a penalty, but as liquidated damages.
3. No forfeiture under a Bid bond shall exceed the lesser of (a) the difference between the Bid for which the Bid bond was written and the next low Bid of another Bidder, or (b) the face amount of the Bid bond.
4. All bonds shall be executed by a surety company selected by the Bidder, which is legally authorized to do business in the State of North Carolina (NCGS §44 A-26), and the bond shall be the same in both form as well as substance as AIA Document A310, Bid Bond.
5. The Bidder shall require the attorney-in-fact, who executed the required bond on behalf of the surety company, to affix thereto a certified and current copy of the power of attorney.
6. The bond premium shall be paid by the Bidder and the cost shall be included in the Bid price.
7. Any inspection of procurement transaction records shall be subject to reasonable restrictions to ensure the security and integrity of the records.

M. OPENING OF BIDS

1. Bids will be opened publicly and read aloud on the date and time set for the Bid Opening in the Notice to Bidders.
2. Any Bidder, upon request, shall be afforded the opportunity to inspect Bid records within a reasonable time after the opening of all Bids but prior to award, except in the event that PWC decides not to accept any of the Bids and to reopen the contract. Otherwise, bid records shall be open to public inspection only after the award of the Contract.
3. Any inspection of procurement transaction records shall be subject to reasonable restrictions to ensure the security and integrity of the records.

N. MODIFICATION OF BIDS

1. A Bid may be modified or withdrawn by the Bidder at any time prior to the time and date set for the Bid Opening. The Bidder shall notify the PWC Procurement Department in writing of its intentions.
2. Modified and withdrawn Bids may be resubmitted to the PWC Procurement Department up to the time and date set for the Bid Opening.

O. WITHDRAWAL OF BID DUE TO ERROR

1. If the Bidder desires to withdraw its Bid, the Bidder must do so before the time fixed for the opening, without prejudice, by communicating its purpose in writing to PWC. After bids are open, bids may only be withdrawn in strict accordance with N.C.G.S. Section 143-129-1

P. BIDS TO REMAIN OPEN

1. All Bids shall remain open for ninety (90) calendar days after the day of the Bid Opening.

Q. AWARD OF CONTRACT

1. PWC reserves the right to reject any and all Bids, to waive any and all informalities, and to disregard all nonconforming, nonresponsive, or conditional Bids. PWC reserves the right to request additional information from any or all bidders for evaluation purposes. Failure or refusal to furnish additional information as requested may result in the rejection of the bid.
2. In case of a tie Bid, the tie shall be decided by lot.
3. It is the intent of PWC to recommend the award of this contract to the lowest responsive, responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. In determining the lowest responsive Bidder, PWC may consider, among other criteria, the Bidder's past performance conduct on other contracts, and other information provided by the Bidder as noted below.
4. In determining the lowest responsive Bidder, PWC will evaluate the Bidder's proposed Bid price and the completeness of the submitted bid in accordance with the requirements of the Contract Documents.
5. PWC may consider the operating costs, maintenance considerations, performance date, and guarantees of materials and equipment.
6. PWC may conduct such investigations as deemed necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of the Bidders, as well as other considerations, to include but not limited to resources available to the Bidder to perform the work effectively, proposed Subcontractors and other persons and organizations to do the work in accordance with the Contract Documents to PWC's satisfaction within the prescribed time.
7. PWC reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to PWC's satisfaction.
8. If the Contract is to be awarded, PWC will give the Successful Bidder a Notice of Award within ninety (90) days after the day of the Bid Opening.
9. The Bidder to whom the contract is awarded shall, within ten (10) days after prescribed documents are presented for signature, execute and deliver the Contract Documents and any other forms or bonds required by the Bid to PWC.
10. The Bidder is required to complete the attached forms that will allow PWC to verify that the Bidder is qualified to perform the Work described in these Contract Documents. All forms shall be completed and submitted with the Bid. Failure to submit all the required forms shall be considered grounds for PWC to reject the bid.

PWC will review all of the bids and qualification data to determine the lowest responsive, responsible Bidder. PWC reserves the right to not award the Contract to the lowest bidder if the information provided is not complete, does not meet the satisfaction of PWC, or has been falsified. PWC will not request any additional information in order to allow the Contractor to complete bid.

11. During the evaluation phase, bid submittals will be reviewed to ascertain which bids technically and otherwise address all the requirements of these Contract Documents. Bid submittals determined to be technically non-responsive or not sufficiently responsive may be disqualified.

The Bidder shall address each of the Evaluation Criteria as requested in the Technical Evaluation Criteria Form located within Section A Project Specifics Bid Submittal Documents. To be considered substantive, the information must respond to all requirements.

12. PWC may conduct such investigations/verifications as deemed necessary to establish the responsibility, qualification and financial ability of the Bidder. Should PWC find that the apparent low bidder is not the lowest responsive, responsible bidder by integrity of the information furnished, said apparent low bidder will be so notified and its bid bond shall be returned without prejudice. Failure or refusal to furnish any items of information requested by PWC shall be considered as non-responsive and therefore basis for rejection of the bid.

R. TAXES

1. The Successful Bidder shall pay all county, city, state and federal taxes required by laws in effect at the time Bids are received and resulting from the Work or traceable thereto, under whatever name levied.
2. Said taxes shall not be in addition to the contract price between PWC and the Successful Bidder. The taxes shall be an obligation of the Successful Bidder and not of PWC. PWC shall be held harmless from same by the Successful Bidder.

S. PERFORMANCE AND OTHER BONDS

1. The PWC General Conditions set forth PWC's requirements as to Performance and other Bonds.

T. E-VERIFY REQUIREMENTS

1. Contractor hereby acknowledges that "E-Verify" is the federal E-Verify program operated by the US Department of Homeland Security and other federal agencies which is used to verify the work authorization of newly hired employees pursuant to federal law and in accordance with Article 2, Chapter 64 of the North Carolina General Statutes.
2. Contractor further acknowledges that all employers, as defined by Article 2, Chapter 64 of the North Carolina General Statutes, must use E-Verify and after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS §64-26(a).
3. Contractor hereby pledges, attests and warrants through execution of this Agreement that Contractor complies with the requirements of Article 2, Chapter 64 of the North Carolina General Statutes and further pledges, attests and warrants that any subcontractors currently employed by or subsequently hired by Contractor shall comply with any and all E-Verify requirements. Failure to comply with the above requirements shall be considered a breach of this Agreement.

U. IRAN DIVESTMENT ACT

1. As mandated by N.C.G.S. 147-86.59(a), the Contractor hereby certifies that it is not listed on the Final Divestment List created by the North Carolina State Treasurer pursuant to N.C.G.S. 147-86.58. Contractor further certifies that in accordance with N.C.G.S. 146-86.58(b) that it shall not utilize any subcontractor found on the State Treasurer's Final Divestment List. Contractor certifies that the signatory to this Purchase Order authorized by the Contractor to make the foregoing statement.

*** END OF SECTION ***

SECTION A – PROJECT SPECIFICS BID SUBMITTAL DOCUMENTS

**BID SCHEDULE – PERFORMANCE AND DELIVERY
FAYETTEVILLE PUBLIC WORKS COMMISSION
COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER
STORAGE TANK**

Pre-Bid Meeting:	10:00 a.m., Tuesday, April 29, 2025
(NON - MANDATORY)	Fayetteville Public Works Commission Administrative Building Conference Room 107 955 Old Wilmington Road Fayetteville, NC 28301
Deadline for Questions from Bidders ¹	5:00 p.m., Tuesday, May 6, 2025
Deadline for Addenda issued by PWC Procurement Department and Project Engineer ²	5:00 p.m., Thursday, May 8, 2025
Bid Opening (Submittal Deadline)	2:00 p.m., Wednesday, May 14, 2025 Fayetteville Public Works Commission Administrative Building Conference Room 107 955 Old Wilmington Road Fayetteville, NC 28301
Target Commission Meeting	Wednesday, May 28, 2025
Target City Council Meeting	Monday, June 9, 2025
Contract Time:	120 days
Liquidated Damages:	Insert amount \$500.00 per day for each day beyond the Final Completion Date
Bid Acceptance Period	Within ninety (90) Calendar Days unless otherwise noted

1. Questions regarding this bid must be submitted in writing to the attention of Shelby Lesane, Procurement Advisor II, by email to procurement@faypwc.com.

Bidders are expressly prohibited from contacting any FPWC official or employee associated with this Invitation to Bid, except as noted above. Violation of this prohibition is grounds for the immediate disqualification of the bidder.

2. Any addenda to these Contract Documents will be issued by the Project Engineer no later than the date and time stated above.

BID SUBMITTAL CHECKLIST

- ☐ 1. Enter Contractor's License Number where called for in the Bid Form and on the outside of the sealed envelope containing the Bid.
- ☐ 2. Photocopy of Contractor's License.
- ☐ 3. Bid Bond
- ☐ 4. Bid Forms Section 00300.
- ☐ 5. Provide the responsible North Carolina Registered Agent for Insurance Claims. Include contact information.
- ☐ 6. Provide the proposed responsible Bonding Company name. Include contact information.
- ☐ 7. List of proposed Subcontractors and material suppliers exceeding 5% of the Contract Value.
- ☐ 8. Non-Collusive Affidavit.
- ☐ 9. Nondiscrimination Clause.
- ☐ 10. Affidavit of Organization and Authority and Sworn Statement.
- ☐ 11. Equal Employment Opportunity Acknowledgment.
- ☐ 12. Certification regarding Debarment, Proposed Debarment, and other Responsible Matters.
- ☐ 13. FTA Certification Regarding Lobbying.
- ☐ 14. Affidavit A – Listing of Good Faith Efforts, et al.
- ☐ 15. Affidavit B – (Only if the Contractor will perform **ALL ELEMENTS OF THE WORK** on this project with their own forces **AND** will complete **ALL ELEMENTS OF THIS PROJECT WITHOUT THE USE OF SUBCONTRACTORS, MATERIAL SUPPLIERS, OR PROVIDERS OF PROFESSIONAL SERVICES**).
- ☐ 16. Affidavit E - Identification of Minority Business Participation Form.
- ☐ 17. SLS / MWDBE Disclosure Form.

****FAILURE TO SUBMIT THE ABOVE FORMS WITH THE BID FORM PROVIDED HEREIN MAY BE JUST CAUSE FOR REJECTION OF THE BID BY THE OWNER****

***** THIS PAGE INTENTIONALLY LEFT BLANK *****

00300 - BID FORM

TO: **Fayetteville Public Works Commission**
Attn: Shelby Lesane, Procurement Advisor II
955 Old Wilmington Road
Fayetteville, North Carolina 28301

PROJECT: **PWC2425072 - COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK**

FROM: BIDDER

ADDRESS

DATE OF BID

, 20

- A. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into a Contract with OWNER in the form included in the Contract Documents to perform and furnish all Work (as that term is defined in the Construction Agreement) specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the Contract Documents.
- B. BIDDER accepts all of the terms and conditions of the Instructions to Bidders, including, without limitation, those dealing with the disposition of payment and performance bonds, and insurance certificates. This bid will remain open for ninety (90) calendar days after the day of Bid opening. BIDDER will sign the Contract and submit the Contract Security and other documents required by the Contract Documents within ten (10) days after the date of receipt by the BIDDER.
- C. In submitting this Bid, Bidder represents, as more fully set forth in the Contract, that:
1. BIDDER has examined copies of all the Contract Documents and of the following addenda, receipt of all which is acknowledged on the bid summary page:
 2. BIDDER has examined the site and locality where the Work is to be performed, the legal requirements (federal, state, and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress of performance of the work and has made such independent investigations as BIDDER deems necessary.
 3. BIDDER acknowledges that OWNER does not assume responsibility for the

accuracy of dimensions or completeness of information and data shown or indicated in the Bidding Documents with respect to existing facilities.

4. BIDDER has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site of the Work (except underground facilities) and all drawings of physical conditions in or relating to existing surface or subsurface structures, pipelines, and utilities at or contiguous to the site are provided within these Contract Documents. Geotechnical Reports and other information regarding subsurface conditions are identified in the attached appendices and detailed in Article V of the PWC General Conditions. BIDDER acknowledges that the OWNER does not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to underground facilities at or contiguous to the site of Work. BIDDER had obtained and carefully studied (or assumes responsibility for have done so) all such additional or supplementary examinations investigations, explorations, tests, studies, and data that are necessary to identify and understand conditions (surface, subsurface, and underground facilities) at or contiguous to the site of Work or otherwise which may affect cost, progress, performance, or furnishing the Work or which relate to any aspect of means, methods, techniques, sequences, and procedures of construction to be employed by Bidder and safety precautions and programs incident thereto. BIDDER waives all rights to claim that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the proper submission of the Bid for the performance and furnishing of the Work in accordance with the Contract Time, Contract Price, and other terms and conditions of the Contract Documents.
5. BIDDER hereby certifies that, if awarded the Contract for construction of the Project, it will take all possible actions to minimize costs to the OWNER which are related to any disruptions in any part of the Work resulting from unforeseeable conditions which may be encountered and work changes or additions which may be made.
6. BIDDER has correlated the information known to BIDDER, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, exploration, tests, studies, and data with the Contract Documents.
7. BIDDER has given OWNER written notice of all conflicts, errors, ambiguities, or discrepancies that BIDDER has discovered in the Contract Documents and the written resolution thereof by OWNER is acceptable to BIDDER, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
8. By bidding in response to this invitation, the BIDDER represents that in the preparation and submission of this Bid, said BIDDER did not, either directly or indirectly, enter into any combination or arrangement with any person, firm or

corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section 1).

9. Bid form must be completed in blue or black ink or by typewriter. The Bid price of each item on the form must be stated in both words and numerals. In case of a conflict, words shall take precedence. Discrepancies in the multiplication of units of work and unit prices will be resolved in favor of the correct multiplication of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.
10. BIDDER understands that the award of contract will be made on the basis of the total Bid amount which will be determined as the sum of the unit price and lump sum Bid Items.
11. BIDDER understands that quantities are estimated and are not guaranteed; they are solely for comparing Bids and establishing the total Bid amount. The Price will be modified by Change Order, and final payment will be based on the quantities of work actually furnished and installed by the successful BIDDER.
12. BIDDER shall complete the Work for the prices indicated on the next page.

- BID SUMMARY-

TOTAL BASE BID \$ _____

ALTERNATE TOTAL BASE BID \$ _____

Alternate Price to provide SSPC-SP 7
Brush-Off Blast Clean surface preparation
at the interior dry "non-immersion" areas,
vs. the base bid of a Power Wash.

The BIDDER has received, acknowledged, and used the following addenda in completing the Bid. (Initial and Date as appropriate).

Addendum No. 1	Date _____
Addendum No. 2	Date _____
Addendum No. 3	Date _____
Addendum No. 4	Date _____
Addendum No. 5	Date _____
Addendum No. 6	Date _____
Addendum No. 7	Date _____

The undersigned BIDDER _____ (Contractor Name) certifies that they are licensed as a Contractor under N.C.G.S § 87, and that their license number is _____ (License Number).

The undersigned BIDDER hereby agrees to accept an award of the Contract based on the Total Contract Amount as accepted by the OWNER and as indicated on the Notice of Award.

A. BIDDER agrees that Work shall be completed within the time frame indicated in the Agreement as follow:

1. All work described herein to be complete, including restoration and all punch list items from Notice to Proceed until June 30, 2025.
2. The BIDDER acknowledges that time is of the essence in this Contract and that the OWNER will suffer financial loss if the Work is not complete within the time specified in Paragraph D.1 above plus any extensions thereof allowed in accordance with these Contract Documents. BIDDER also recognizes the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by the OWNER if the Work is not complete on time. The Bidder agrees to diligently pursue all available work and complete all work in an expeditious manner.

B. The following documents are attached to and made part of this bid:

Required Bid Security in the form of either a cashier's check or certified check or Bid Bond in the amount of 5% of maximum Bid price.

C. Communications concerning this Bid shall be addressed to: (CONTRACTOR's Name, Address and Telephone Number)

D. The terms used in this Bid which are defined in Definitions and Terminology Section of the PWC General Conditions or as otherwise specifically defined in the Contract Documents have the meanings assigned to them therein, which are incorporated by reference as if fully set forth herein.

E. An individual contractor is required to furnish his social security number and sole proprietorship, partnership and corporation are required to furnish their employer identification numbers to Fayetteville Public Works Commission. Please indicate this information on this Bid Form as follows:

Social Security Number: _____

Federal Employer Identification Number: _____

SUBMITTED ON ____ day of _____ 2025

AN INDIVIDUAL

BY: _____ (SEAL)

(Individual's Name and Signature)

Doing Business as: _____

North Carolina Contractor Registration Number: _____

Business Address: _____

Phone Number: _____

Subscribed and sworn to before me this ____ day of _____ 2025

NOTARY PUBLIC

My Commission Expires: _____

A PARTNERSHIP

BY: _____ (SEAL)

(Firm Name)

(General Partner and Signature)

North Carolina Contractor Registration Number: _____

Business Address: _____

Phone Number: _____

Subscribed and sworn to before me this ____ day of _____ 2025

NOTARY PUBLIC

My Commission Expires: _____

A CORPORATION

BY: _____

(Corporation Name)

(State of Incorporation)

BY: _____ (SEAL)

(Name and Title of Person Authorized to Sign and Signature)

ATTEST: _____

(Secretary or Assistant Secretary and Signature)

North Carolina Contractor Registration Number: _____

Business Address: _____

Phone Number: _____

Subscribed and sworn to before me this ____ day of _____ 2025

NOTARY PUBLIC

My Commission Expires: _____

A JOINT VENTURE

BY: _____

(Name and Signature)

Doing Business as: _____

North Carolina Contractor Registration Number: _____

Business Address: _____

Phone Number: _____

Subscribed and sworn to before me this ____ day of _____ 2025

NOTARY PUBLIC

My Commission Expires: _____

(Each joint venturer must sign. The name of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

LIST OF SUBCONTRACTORS

In compliance with the Instructions to Bidders and the Supplementary Conditions, the undersigned submits the following names of Subcontractors to be used in performing the Work.

The Bidder certifies that all Subcontractors listed are eligible to perform the Work and that all Subcontractors performing more than five percent of the work are listed.

<u>Subcontractor's Name</u>	<u>Subcontractor's Work</u>	<u>% of Work</u>
<hr/>	<hr/>	<hr/> %
<hr/>	<hr/>	<hr/> %
<hr/>	<hr/>	<hr/> %
<hr/>	<hr/>	<hr/> %
<hr/>	<hr/>	<hr/> %

Bidder's Signature

BID BOND

This is a Bid Bond that is subject to the provisions of Article 3 of Chapter 44A of the North Carolina General statutes.

This Bond is executed on _____, 20 ____.

The name of the PRINCIPAL is _____ (1)

(2)

The name of the SURETY is _____

Fayetteville Public Works Commission, Fayetteville, North Carolina is the OWNER

The amount of the Bond is _____

(Dollars) (\$ _____)

KNOW BY ALL MEN BY THESE PRESENTS, the Principal and Surety above named are hereby held and firmly bound unto the above named OWNER hereinafter called the OWNER in the penal sum of the amount stated above in lawful money of the United States, for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the OWNER a certain Bid, attached hereto and hereby made a part hereof to enter into a Contract in writing, for the construction of:

PWC2425072 – COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK

NOW, THEREFORE

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a Contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then

this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

ATTEST:

(Principal Secretary)
(SEAL)

Principal

BY: _____ (3)

(Address)

Witness as to Principal

Surety

(Address)

(Address)

ATTEST:

N.C. Resident Agent
(SEAL)

Witness as to Surety

(Address)

- (1) Correct name of Contractor
- (2) A Corporation, a Partnership or an Individual, as the case may be
- (3) If Contractor is a Partnership, all partners should execute Bond

**POWER OF ATTORNEY
(Attach)**

AFFIDAVIT OF ORGANIZATION AND AUTHORITY SWORN STATEMENT
COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK

STATE OF _____

COUNTY OF _____

_____ being the first duly sworn on oath deposes and says that the Bidder on the attached Bid Form is organized as indicated below and that all statements herein made are made on behalf of such Bidder and that this deponent is authorized to make them.

(Fill Out Applicable Paragraph)

1. CORPORATION

The bidder is a corporation organized and existing under the laws of the State of _____ and its President is _____, and its Secretary is _____, and does have a corporate seal. The _____ is authorized to sign construction Contract and Bids for the company by action of its Board of Directors taken _____, a certified copy of which is hereto attached. (Strike out last sentence if not applicable.)

2. PARTNERSHIP

The Bidder is a Partnership consisting of _____ and _____, partners doing business under the name of _____.

3. SOLE TRADER

The Bidder is an individual and if operating under a trade name, such trade name is as follows:

4. ADDRESS

The business address of the Bidder is as follows:

Its phone number is _____

Bidder

By: _____

EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Contract the Contractor agrees as follows:

- a. The Contractor will not discriminate against any employee or applicant because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of the nondiscrimination clause.
- b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- c. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other Contract understanding, a notice, to be provided, advising the labor union or worker's representative of the Contractor's commitments under the Equal Employment Opportunity Section of this Contract, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further OWNER Contracts.
- e. The Contractor will include the provisions of this section in every subcontract or purchase order unless exempted by rules, regulations, or orders of the OWNER so that such provisions will be binding upon each Subcontractor or vendor.

(Use the following form for signatures by a CORPORATION):

Corporate Name

ATTEST:

(Assistant) Secretary

(Vice) President

(CORPORATE SEAL)

(Use the following form for signatures by and INDIVIDUAL):

BY: _____ (Seal)

WITNESS:

(ACKNOWLEDGEMENT OF THE ABOVE SIGNATURE MUST BE NOTARIZED USING FORM
ON FOLLOWING PAGE)

NONDISCRIMINATION CLAUSE

It is specifically agreed as part of the consideration of the signing of this Contract that the parties hereto, their agents, officials, employees or servants will not discriminate in any manner on the basis of age, handicap, race, color, creed, sexual orientation or national origin with reference to the subject matter of this Contract, no matter how remote.

This provision being incorporated for the benefit of Fayetteville Public Works Commission, Fayetteville, North Carolina and its residents may be enforced as set out in said ordinances, enforcement of this provision shall be by action for specific performance, injunctive relief, or other remedy as by law provided.

This provision shall be binding on the successors and assigns of the parties hereto with reference to the subject matter of this Contract.

(Use the following form for signatures by a CORPORATION):

ATTEST:	<hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <div>Corporate Name</div>
<hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <div>(Assistant) Secretary</div>	BY: <hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <div>(Vice) President</div>
<hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <div>(Printed Name)</div>	BY: <hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <div>(Printed Name)</div>

(Corporate Seal)

(Use the following form for signatures by a PARTNERSHIP or INDIVIDUAL):

	BY: <hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <div>(SEAL)</div>
	<hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <div>(Printed Name)</div>

WITNESS:

(Printed Name)

NON-COLLUSIVE AFFIDAVIT

State of _____)

)

County of _____)

_____ being first duly sworn,
deposes and says that:

- (1) He is the _____
(Owner, Partner, Officer, Representative or Agent)
of _____ the BIDDER that has submitted
the attached BID;
- (2) He is fully informed respecting the preparation and contents of the attached BID and of all pertinent
circumstances respecting such BID;
- (3) Such BID is genuine and is not a collusive or sham BID;
- (4) Neither the said BIDDER nor any of its officers, partners, owners, agents, representatives,
employees or parties in interest, including this affiant, have in any way colluded, conspired,
connived or agreed, directly or indirectly, with any other BIDDER, firm, or person to submit a
collusive or sham BID in connection with the Contract for which the attached BID has been
submitted; or to refrain from bidding in connection with such Contract; or have in any manner,
directly or indirectly, sought by agreement or collusion, or communication, or conference with any
BIDDER, firm, or person to fix the price or prices in the attached BID or of any other BIDDER, or to
fix any overhead, profit, or cost elements of the BID price or the BID price of any other BIDDER, or
to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage
against (Recipient), or any person interested in the proposed Contract;
- (5) The price or prices quoted in the attached BID are fair and proper and are not tainted by any
collusion, conspiracy, connivance, or unlawful agreement on the part of the BIDDER or any other
of its agents, representatives, owners, employees or parties in interest, including this affidavit.

BY _____

ITS _____

(Title)

Subscribed and sworn to before me this _____ day of _____, 20 ____ .

Notary Public

My Commission Expires:

F.T.A. CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned _____ certifies, to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*.)]
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to

a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, *apply* to this certification and disclosure, if any.

_____ Signature of Contractor's Authorized Official

_____ Name and Title of Contractor's Authorized Official

_____ Date

**CERTIFICATION OF PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION AND
OTHER RESPONSIBILITY MATTERS**

The Primary Participant, _____ (major third party contractor), certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(If the primary participant is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT _____ CERTIFIES
OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE
STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT
THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET. SEQ. ARE APPLICABLE THERETO.

Signature

Title

Printed Name

Date

***** THIS PAGE WAS INTENTIONALLY LEFT BLANK*****



**MINORITY, WOMEN, AND DISADVANTAGED
BUSINESS ENTERPRISE PROGRAM**

for

**Construction, A&E Services, Purchase Contracts,
Professional Services, and General Services**

Contents

PURPOSE	4
OVERVIEW	4
I. INTRODUCTION	5
II. ADMINISTRATION	5
III. DEFINITIONS	5
IV. PROCEDURES FOR CONSTRUCTION CONTRACTS	7
A. Purpose and Application	7
B. MWDBE Aspirational Goals	7
C. Invitation for Bids.....	7
D. PWC Responsibilities	8
E. Contractor Good-Faith Efforts.....	9
F. Awarding of Construction Contracts	11
G. Counting MWDBE Participation Toward Meeting the Aspirational Goals	12
H. Documentation of Attainment of MWDBE Participation Requirements	13
V. PROCEDURES FOR ARCHITECTURE & ENGINEERING (A&E) CONTRACTS	13
A. Purpose and Application	13
B. MWDBE Aspirational Goals	14
C. Request for Qualifications	14
D. PWC Responsibilities	14
E. Meeting MWDBE Aspirational Goals.....	15
F. Counting MWDBE Participation	15
G. Provider Good-Faith Efforts	15
H. Documenting Good-Faith Efforts	16
VI. PROCEDURES FOR PURCHASE CONTRACTS	17
A. Purpose and Application	17
B. MWDBE Aspirational Goals	17
C. Request for Quotes or Invitation for Bids.....	17
D. PWC Responsibilities	18
E. Award of Purchase Contracts	19
VII. PROCEDURES FOR PROFESSIONAL, GENERAL (OTHER) SERVICE CONTRACTS.....	19
A. Purpose and Application	20
B. MWDBE Aspirational Goals	20
C. PWC's Responsibilities	20
D. Request for Proposals	21
E. Meeting MWDBE Aspirational Goals.....	21
F. Counting MWDBE Participation	21

G. Provider Good-Faith Efforts	22
I. Documenting Good-Faith Efforts	23
VIII. UTILIZATION OF JOINT VENTURE.....	23
IX. MWDBE REPORTING PROCEDURE	24
MWDBE COMPLIANCE PROVISIONS.....	25
Affidavit A: Listing of the Good Faith Efforts.....	27
Affidavit B: Intent to Perform Contract with Own Workforce	28
Affidavit C: Percentage of MWDBE Participation	29
Affidavit D: Good Faith Efforts	31
Affidavit E: Identification of MWDBE/Local Participation.....	32
MWDBE ADD / CHANGE FORM.....	33

PURPOSE

The Fayetteville Public Works Commission (PWC) is committed to promoting the utilization of Minorities, Women, and Disadvantaged Businesses by providing equal opportunity for participating in all aspects of PWC's contracting and procurement programs, including but not limited to, construction projects, A&E services, purchase contracts, and professional and general (other) service contracts.

To achieve this purpose, PWC has established this Minority, Women, and Disadvantaged Business Enterprise Program (MWDBE) to support historically underutilized businesses, encourage capacity development, and offer procurement opportunities to certified business enterprises.

OVERVIEW

PWC's MWDBE Program is a voluntary goals program in construction, A&E services, purchase contracts, and professional and general (other) services based on "good-faith efforts." These goals are established for a five-year period and achievement will be evaluated annually.

The aspirational goals of PWC for the utilization of Minority, Women, and Disadvantaged Business Enterprises are:

Minority business participation in construction services	14%
Women business participation in construction services	11%
Minority business participation in A&E services	6%
Women business participation in A&E services	5%
Minority business participation in purchase contracts	4%
Women business participation in purchase contracts	4%
Minority business participation in professional services	19%
Women business participation in professional services	3%
Minority business participation in general (other) services	9%
Women business participation in general (other) services	4%

I. INTRODUCTION

In 2021, Fayetteville Public Works Commission (PWC) contracted with Griffin & Strong, P.C. (GSPC) to conduct a Disparity Study to determine the effectiveness of the current policies related to local, minority, and women owned businesses and to recommend modifications and adjustments, if necessary, to PWC's policies that comply with the law.

PWC continues to implement race and gender conscious and race and gender-neutral measures to try to increase utilization of Minority, Women, and Disadvantaged Business Enterprise (MWDBE) firms. PWC has a basis to continue race and gender conscious remedies or policies toward achieving annual aspirational goals.

The MWDBE aspirational goals and guidelines developed and recommended do not require nor provide for racially based set-asides; rather they require good-faith effort by both local government and contractors to recruit and select minorities and women businesses, consistent with North Carolina Statutes and the Constitution of the United States as interpreted by the Croson Decision.

II. ADMINISTRATION

PWC General Manager/CEO is authorized to take all usual and legal administrative actions necessary to implement this Program. The ultimate responsibility for the MWDBE Program administration is assigned to the PWC General Manager/CEO or its designee. PWC General Manager/CEO or its designee is either to be personally responsible or to designate a specific person to coordinate and manage this Program. PWC General Manager/CEO or its designee is responsible for determining whether a contractor has complied with this Program and shown good-faith efforts to do so. Except for those staff services specifically assigned by this Program to other departments, the heads of departments responsible for the construction, and procurement of services and goods shall be responsible to PWC General Manager/CEO or its designee and shall cooperate with PWC General Manager/CEO or its designee in implementing this Program.

The MWDBE Program shall apply to all construction contracts, A&E contracts, purchase contracts, and services as specified in Sections IV through VII. The provisions of this Program take precedence over any other department plans or procedures in conflict herewith, except specific requirements mandated by terms or conditions of agreements in force between PWC and the federal government or the State of North Carolina that require different procedures than those described in this Program. This Program will be evaluated at the end of five years to determine its effectiveness and what adjustments are required.

III. DEFINITIONS

Affirmative Action - Specific steps to eliminate discrimination and efforts to ensure nondiscriminatory results and practices in the future, and to fully involve Minority, Women, and Disadvantaged Business Enterprises in contracts and programs.

Aspirational Goal/Goal - A voluntary percentage or quantitative objective.

Bidder/Participant - Any person, firm, partnership, corporation, association, or joint venture seeking to be awarded a public contract or subcontract.

Contract - A mutually binding legal relationship or any modification thereof obligating the seller to furnish equipment or service, including construction and leases, and obligating the buyer to pay for them.

Contractor - Any person, firm, partnership, corporation, association, or joint venture that has been awarded a public contract or lease, including every subcontract on such a contract.

Day – A calendar day of 24 hours measured from midnight to the next midnight. Also referred to throughout the Program documents as “days or “calendar days.”

Discrimination - To distinguish, differentiate, separate and/or segregate on the basis of age, race, religion, color, sex, national origin, handicap and/or veteran status.

Equipment - Includes materials, supplies, commodities, and apparatus.

Joint Venture - An association of two or more businesses to carry out a single business enterprise for profit, for which purpose they combine their property, capital, efforts, skills, and knowledge.

Lessee - A business that leases, or is negotiating to lease, property from PWC or equipment or services to PWC, or to the public on PWC property.

Minority - A person who is a citizen or lawful permanent resident of the United States and who is:

- a. Black American (a person having origins in any of the black racial groups of Africa);
- b. Hispanic American (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- c. Portuguese (a person of Portuguese, Brazilian, or other Portuguese culture origin, regardless of race);
- d. Asian American (a person having origins in any of the original people of the Far East, Southeast Asia, the Indian sub-continent, or the Pacific Islands); and
- e. Native American (a person having origins in any of the original people of North America).

MWDBE - Any certified minority, women, and disadvantaged business enterprise.

Minority, Women, Disadvantaged Business Enterprise (MWDBE) - A business that is at least fifty-one (51) percent owned and controlled by minority group members or women. An MWDBE is **bona fide** only if the minority group or female ownership interests are real and continuing and not created solely to meet the MWDBE requirement. In addition, the MWDBE must itself perform satisfactory work or services or provide supplies under the contract and not act as a mere conduit. In short, the contractual

relationship must also be **bona fide**.

IV. PROCEDURES FOR CONSTRUCTION CONTRACTS

A. Purpose and Application

1. The general purpose of this Program is to help develop and support Minority, Women, and Disadvantaged Business Enterprises (MBE, WBE, and DBE) by providing opportunities for participation in the performance of all construction contracts financed entirely with PWC funds.
2. This Program shall apply to construction contracts when the PWC's estimated contract cost is \$100,000 or more, except when a contract is exempt from competitive bidding under the General Statutes of North Carolina. Contracts between \$30,000 and \$99,999.99 will also be covered by the exemption.
3. Where contracts are financed in whole or in part with federal or state funds, including grants, loans, or other funding sources containing MBE, WBE, DBE Programs, PWC will follow the federal government or the State of North Carolina. PWC General Manager/CEO or its designee will be responsible for monitoring the Program to ensure the goals are met.
4. Since PWC construction contracts are prepared by the Engineering and Facilities Departments, each of these departments shall prepare such documents with Procurement pre-approved templates for the bidding process, which includes the Program goals as required to implement this Program.
 - a. Within sixty (60) days of the Commission's approval of this Program, the departmental procedures and contract provisions shall be in effect for all bid documents issued after the date of Commission approval.

B. MWDBE Aspirational Goals

1. To implement the purpose of this Program, the goal shall be to award at least fourteen (14) percent of the total of all construction contract award amounts in each fiscal year to MBE firms and at least eleven (11) percent to WBE firms.
2. PWC General Manager/CEO or its designee may determine that higher or lower goals are appropriate on a project-by-project basis, where it can be shown that the type, size, or location of the project will affect the availability of MBE, WBE, or DBE firms, so long as the aggregate of all contracts does not lower the annual goals.

C. Invitation for Bids

1. Bidders shall submit MWDBE information with their bids. Such information shall be subject to verification by MWDBE Program staff before awarding the contract. The information shall include the names of the MWDBEs to be used and the dollar value of each such MWDBE transaction.

2. Contractors, subcontractors, suppliers, or MWDBE members of a joint venture intended to satisfy the PWC's MBE/WBE/DBE goals shall be certified by the State Department of Transportation (DOT) or North Carolina Office of Historically Underutilized Business (HUB).

D. PWC Responsibilities

1. **MWDBE Directory** – The MWDBE Program staff will establish and maintain a directory of certified Minority, Women, and Disadvantaged Business Enterprises. The purpose of the directory is to provide a resource for prime bidders on PWC construction projects who intend to solicit bids from MBE and WBE subcontractors and suppliers to meet PWC's MBE and WBE goals. The directory will not constitute a recommendation or endorsement of any listed firm.

The directory will be developed and maintained by the MWDBE Program Staff.

- a. The directory will include:
 - i. Business name, address, telephone number, and email address;
 - ii. Name(s) of business owner(s);
 - iii. Type of license;
 - iv. NAICS;
 - v. Type of MWDBE certification, and;
 - vi. Certification and expiration date with an acceptable agency.
 - b. PWC shall advertise on a contract-by-contract basis throughout the year as deemed necessary for MWDBE outreach. Advertisements shall be placed with minority/women-focused publications (state and local). Notification will also be sent to community organizations which might have knowledge of MWDBE firms.
 - c. The department heads and MWDBE Program staff should attend local and regional business fairs to promote the MWDBE Program. The departments shall also identify potentially eligible contractors through affirmative action efforts and the normal course of business. The names of identified contractors shall be forwarded to the MWDBE Program staff.
2. **MWDBE Eligibility Standards** – The eligibility of a business is determined by the ownership and control of the business.
 - a. An eligible Minority Business Enterprise owner is a citizen or lawful permanent resident of the United States, a member of a recognized ethnic or racial group, and fifty-one (51) percent owner of the business.
 - b. The eligible ethnic or racial groups are:
 - i. Black/African American
 - ii. Hispanic American
 - iii. Asian American

iv. Native American

- c. An eligible Women Business Enterprise owner is a citizen or lawful resident of the United States and a fifty-one (51) percent owner of the business and is female.

3. **Removal of MWDBE Procedures** - A contractor certified as a MWDBE may be removed from the program directory for, but not limited to, any of the following reasons:

- a. **Change of Status** - PWC General Manager/CEO or its designee may remove a MWDBE if he/she finds that the ownership or control of the business changes so that the business no longer meets the requirements of Section IV, D(2) (b) and (c) above.
- b. **Failure to comply with the MWDBE Program** - The certification of a business as a MWDBE may be removed by PWC General Manager/CEO or its designee if he/she finds any of the following conditions:
 - i. That a business has submitted inaccurate, false or incomplete information to PWC;
 - ii. That in performance of a contract, a business has failed to comply with requirements of the contract with PWC;
 - iii. That in performance of a contract, a business has failed to comply with MWDBE requirements of a contract established by a contractor with PWC in response to PWC requirements; or
 - iv. That a business has otherwise failed to comply with the provisions of this MWDBE Program.
- c. **Appeal of Removal** - A business may appeal a determination of a MWDBE by satisfying the eligibility requirements in Section IV, D (2) (b) and (c).
- d. **Pre-bid Meeting or Site Visit** - PWC may hold a pre-bid meeting on formal and informal bid contracts for all prospective bidders, subcontractors, and MWDBEs for the purpose of explaining the provisions of the MWDBE Program, the process for bidding, and the contract to be performed. Available data on MWDBEs interested and/or capable of engaging in the prospective contract shall be made available to prospective bidders, contractors, and subcontractors.

E. Contractor Good-Faith Efforts

The contractor (bidder) shall make good-faith efforts to encourage the participation of MWDBEs in projects prior to submission of bids in order to be considered as a responsive bidder. A good-faith effort shall include, at a minimum, specific affirmative action steps and complete documentation thereof. The following list of factors to determine good-faith effort is not exclusive or exhaustive:

1. Whether the bidder attended any pre-submittal or pre-bid meetings, if scheduled

by PWC;

2. Whether the bidder identified and selected specific items of the project for which the contract could be performed by Minority and/or Women Business Enterprises, to provide an opportunity for participation by those enterprises (including, where appropriate, breaking down contracts into economically feasible units to facilitate MWDBE participation);
3. Whether the bidder advertised, a reasonable time before the date the bids are opened, in one or more daily or minority weekly newspapers or trade associations (i.e., N.C. Minority Business Association), trade journals, or other media;
4. Whether the bidder provided email notice of their interest in bidding on the contract to at least three (3) Minority, Women, or Disadvantaged Business Enterprises (for each identified sub-item of the contract) licensed to provide the specific items of the project a reasonable time prior to the opening of bids;
5. Whether the bidder provided interested Minority, Women, and Disadvantaged Business Enterprises with information about the Plan, specifications, and requirements for the selected subcontracting or material supply work;
6. Whether the bidder contacted PWC's MWDBE Program staff for assistance in identifying minority and women businesses certified with approved public agencies as referenced in Section IV, D (2) (b) and (c);
7. Whether the bidder negotiated in good-faith with Minority, Women, or Disadvantaged Business Enterprises and did not unjustifiably reject as unsatisfactory bids prepared by a Minority, Women, or Disadvantaged Business Enterprises, as defined by PWC;
8. Whether the bidder, where applicable, advised and made efforts to assist interested MWDBEs in obtaining bonds, lines of credit, or insurance required by PWC or contractor;
9. Whether the bidder's efforts to obtain MWDBEs participation could reasonably be expected by PWC to produce a level of participation sufficient to meet the goals of PWC.

Bidders are cautioned that even though their submittal indicates they will meet the MWDBE goals, they should document their good- faith efforts and be prepared to submit this information to protect their eligibility for award of the contract in the event PWC questions whether the good-faith requirement has been met.

10. **Performance of MBE/WBE/DBE Subcontractors and Suppliers** - The MWDBEs listed by the contractor on the Program Affidavits, which is determined by PWC to be certified, shall perform the work and supply the materials for which they are listed unless the contractor has received prior written authorization from PWC to perform the work with other forces or to obtain the materials from other sources.

The contractor shall enter into subcontracts and supply copies of all fully executed subcontracts with each MWDBE listed on the Program Affidavits to PWC's MWDBE Program staff after award of the contract and prior to the issuance of a Notice to Proceed. Any amendments to the subcontracts shall be submitted to the MWDBE Program staff within **five (5) days** of execution.

Authorization to utilize other forces or sources of materials shall be requested by submitting a "Change or Add a Subcontractor Form" for the following reasons:

- a. The listed MWDBE, after having had a reasonable opportunity to do so, fails or refuses to execute a written contract, when such written contract, based upon the general terms, conditions, plans and specifications for the project, or on the terms of such subcontractor's or supplier's written bid, is presented by the contractor.
- b. The listed MWDBE becomes bankrupt or insolvent.
- c. The listed MWDBE fails or refuses to perform his/her subcontract or furnish the listed materials.
- d. The work performed by the listed subcontractor is unsatisfactory according to industry standards and is not in accordance with the plans and specifications; or the subcontractor is substantially delaying or disrupting the progress of the work.

All "Change or Add a Subcontractor Forms" shall be accompanied by good faith efforts documentation as specified on the form.

F. Awarding of Construction Contracts

1. If a construction contract is to be awarded, it shall be awarded in accordance with North Carolina General Statutes to the lowest responsible bidder who complies with all of the prescribed requirements and either:
 - a. Made a good-faith effort to comply with these goals and requirements before the time bids are opened as described above. Where a good-faith effort is claimed by the apparent lowest responsible bidder, the bidder shall be required to submit documentation **WITHIN TWENTY-FOUR (24) HOURS OF PWC'S NOTIFICATION**, which in most instances will occur the day of bid opening to show that the criteria for good-faith efforts have been met, or
 - b. Once a firm is determined to be an eligible MWDBE, and before the contract is awarded, the total dollar value to be paid to the MWDBE shall be evaluated by the MWDBE Program Staff to ensure that it is in accordance with the bidder's proposal.

If the evaluation shows that the bidder has misrepresented MWDBE participation or has not made a good-faith effort to meet the contract goals for MBE or WBE

participation, the bidder may be disqualified.

G. Counting MWDBE Participation Toward Meeting the Aspirational Goals

The degree of participation by MWDBE contractors, subcontractors, suppliers, or joint-venture partners in contract awards shall be counted in the following manner:

1. Once a firm is determined to be an eligible MWDBE contractor in accordance with this Program, the total dollar value of the contract awarded to the MWDBE is counted as participation.
2. The goals can be met by any certified MWDBE contractor, subcontractor, supplier, trucker, or joint-venture partner as listed in PWC and agency directory. All MWDBEs used to meet the goal must be certified by an approved agency and verified by PWC at the time of bid opening. Only certified firms can be counted toward the goal. The standard for certification is set forth in this Program.
3. The total dollar value of a contract with a disadvantaged business owned and controlled by a minority woman is counted toward either the minority goal or the goal for women, but not toward both. The contractor or MWDBE Program staff may choose the goal to which the value is applied.
4. In the case of a joint venture, the joint venture recipient or contractor may count toward its MWDBE goals a portion of the total dollar value of the contract that the MWDBE partner's participation in the joint-venture represents. Credit will be given equal to the minority partner's percentage of ownership in the joint venture. A MWDBE joint-venture partner must be responsible for a clearly defined portion of the work to be performed in addition to satisfying requirements for ownership and control.
5. A recipient or contractor may count toward its MWDBE goals only expenditures to MWDBEs whose ownership interests are real and continuing and not created solely to meet PWC's goals for participation, and that perform a commercially useful function in the work of a contract. A MWDBE is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carries out its responsibilities by actually performing, managing, and supervising the work involved. To determine whether a MWDBE is performing a commercially useful function, the MWDBE Program staff shall evaluate the amount of work subcontracted, industry practices, and other relevant factors. Consistent with normal industry practices, an MWDBE may enter into subcontracts. If a MWDBE contractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of normal industry practices, the MWDBE shall be presumed not to be performing a commercially useful function. Evidence to rebut this presumption may be presented to the MWDBE Program staff. The MWDBE may present evidence to rebut this presumption. The MWDBE Program staff decision on the rebuttal of this presumption is subject to review by PWC General Manager/CEO or its designee. Once a contractor is determined to be an eligible MWDBE in accordance with this section, the total dollar value of the contract awarded to MWDBE is counted toward the applicable MWDBE goals, except as provided in

the provisions of this section.

6. A contractor may count toward its MWDBE goals expenditures for materials and supplies obtained from MWDBE suppliers and manufacturers, provided that the MWDBE assumes the actual and contractual responsibility for the provision of the materials and supplies.

H. Documentation of Attainment of MWDBE Participation Requirements

In order that PWC General Manager/CEO or its designee may make a recommendation to PWC as to the responsiveness of bidders, bidders shall be required to submit the following information on each MWDBE-related subcontract:

1. A description of the subcontract and purchase(s) of significant equipment and supplies to be used to perform the subcontract or prime contract, including the name and address of each MWDBE firm selected, and the name and telephone number of a contact person;
2. The dollar amount of participation of each MWDBE;
3. A statement of intent from the MWDBE subcontractor or material supplier as;
 - a. Identified in Section IV, H(1) above that they intend to contract or supply the materials, or
 - b. Sworn statements, with appropriate documentation, showing that the contractor made a good-faith effort to comply with the MWDBE Program in accordance with Section IV, E of this Program.

V. PROCEDURES FOR ARCHITECTURE & ENGINEERING (A&E) CONTRACTS

A. Purpose and Application

1. The general purpose (goal) of this Program is to help develop and support MWDBEs by providing opportunities for participation in the performance of PWC's A&E contracts financed entirely with PWC funds.
2. This Program applies to all A&E contracts except contracts in those unique circumstances where written exemption of particular contracts is determined as an exception, and less than fifty thousand dollars (\$50,000.00) by PWC General Manager/CEO. PWC General Manager/CEO or its designee will be responsible for administering and monitoring the Program to ensure that appropriate action(s) are taken in efforts of achieving the goals.
3. Where contracts are funded in whole or in part with federal or state funds and the grants, loans, or other funding sources containing MWDBE Program requirements, PWC General Manager/CEO or its designee will be responsible for monitoring the Program to ensure the goals are met.

4. Since PWC Request for Qualifications (RFQ) are prepared by the Engineering and Facilities Departments, each of these departments shall prepare such documents with Procurement pre-approved templates for the qualification-based selection process, which includes the Program goals as required to implement this Program.

B. MWDBE Aspirational Goals

1. To implement this Program, the goal shall be to award six percent (6%) of the total A&E contract dollars awarded in each fiscal year to MBE firms and five percent (5%) to WBE firms. The goals will become effective on the date that PWC approves the Program and continue for a period of five (5) years.

C. Request for Qualifications

1. It is not required that contracts under \$50,000 meet the contract goal. When possible, at least twenty-five (25) percent of the firms notified of the contract opportunity shall be MWDBE. A list of available firms will be provided by the MWDBE Program staff to the Procurement Advisor and Department. The MWDBE Program staff shall track and report the firms that are notified and that provide submittals.

D. PWC Responsibilities

1. Identification of MWDBE Firms

- a. The MWDBE Program staff will establish and maintain a directory of certified Minority, Women, and Disadvantaged Business Enterprises. The purpose of the directory is to provide a resource on PWC A&E projects. The directory will not constitute a recommendation or endorsement of any listed firm. The directory will be developed and maintained by the MWDBE Program Staff.
- b. The directory will include:
 - i. Business name, address, telephone number, and email address;
 - ii. Name(s) of business owner(s);
 - iii. Type of license;
 - iv. NAICS;
 - v. Type of MWDBE certification, and;
 - vi. Certification and expiration date with an acceptable agency.
- c. PWC shall advertise on a contract-by-contract basis throughout the year as deemed necessary for MWDBE outreach. Advertisements shall be placed with minority/women-focused publications (state and local). Notification will also be sent to community organizations which might have knowledge of MWDBE firms.

- d. The department heads and MWDBE Program staff should attend local and regional business fairs to promote the MWDBE Program. The departments shall also identify potentially eligible firms through affirmative action efforts and the normal course of business. The names of identified firms shall be forwarded to the MWDBE Program staff.

E. Meeting MWDBE Aspirational Goals

1. Goals must be met by awarding contracts to certified MWDBE firms. The MWDBE must be certified at the time of the contract award. MWDBE firms not certified at the time of the contract award will not be counted towards MWDBE goals. MWDBE goals may be met by a certified joint venture or partnership. In the case of joint ventures or partnerships, MWDBE participation counted toward the goal will be equal to the percentage of the total dollar value of the contract that the MWDBE partner is responsible for performing.

F. Counting MWDBE Participation

1. The total dollar value of a contract with a disadvantaged business owned and controlled by a minority woman is counted toward either the minority goal or the goal for women, but not toward both. The contractor or MWDBE Program staff may choose the goal to which the value is applied.
2. If a determination is made by the MWDBE Program staff that the goals have not been met, the prime service provider will be required to submit a good-faith effort statement prior to PWC awarding the contract.

G. Provider Good-Faith Efforts

The following is a list of the efforts that should be made by the prime A&E firm to encourage MWDBE participation. In order to receive credit for having made "good faith efforts", the prime A&E firm should document all actions taken to include the following:

1. Attending pre-bid meetings scheduled by the department;
2. Identifying selected specific items of the project which could be executed by a MWDBE;
3. Soliciting MWDBE A&E firm participation in a reasonable time before the solicitations are due through advertisements in circulation media, trade publications, and minority-focused media;
4. Contacting local firms, firms owned by minorities or women, and associations or business development centers which disseminate information to local businesses and businesses owned by minorities or women in a timely manner to allow sufficient time for MWDBEs to respond;
5. Following up on initial solicitations of interest by contacting the MWDBE to determine whether the MWDBE was interested in performing specific items of the

project;

6. Attempting to enter into joint venture or partnership arrangements with MWDBEs and provide interested MWDBEs with information about the requirements for the project;
7. Providing assistance to MWDBEs in the review of qualification submittal and work to be done by sub-A&E firms;
8. Using available directories of certified MWDBEs and other available resources;
9. Ensuring that the firm negotiated in good faith with the MWDBE and did not unjustifiably reject as unsatisfactory qualifications prepared by any Minority, Women, or Disadvantaged Business Enterprise;
10. Making every effort to obtain Minority, Women, or Disadvantaged Business Enterprise participation that could reasonably be expected to produce a level of participation sufficient to meet the goals of PWC; and
11. Providing interested minority, women, and disadvantaged businesses with information relative to project requirements.

H. Documenting Good-Faith Efforts

If the prime A&E firm does not meet the goals for MWDBE participation at the time of qualification submittal, then the following documents indicating "good-faith efforts" should be submitted as a minimum:

1. A report of all proposals received by the prime service provider from MWDBE sub-A&E firms must indicate the action taken by the prime A&E firm in response to the qualification submittal. In cases where proposals have been rejected, the reason for rejection must be indicated.
2. Documentation of efforts to enter into agreements with MWDBEs for sub-A&E work or arrangements for joint ventures, partnerships, or other multi-entity relationships. Also included should be a statement of why agreements or arrangements were not made.
3. Proof of contact with MWDBEs and associations or business development centers that disseminate information to MWDBEs.
4. A copy of emails or notices sent to groups in Section VI, J(3) above notifying them of the firm's intent to submit a qualification submittal to PWC. The emails or notices should indicate the areas of work available for sub-A&E firms.
5. Description of assistance provided to MWDBEs in review of the qualification submittal and work to be done by sub-A&E firms.
6. Description of the use made by firms of available resources such as directories of MWDBEs.

7. Documentation of advertisements sent to general circulation media, trade publications, and minority-focused media.
8. Proof of attendance at any pre-bid meeting.

If the prime A&E firm fails to meet the MWDBE goals with its proposed project team and cannot provide documentation of "good-faith efforts", these failures will be noted to the involved department by the MWDBE Program Staff, and the firm may be disqualified.

VI. PROCEDURES FOR PURCHASE CONTRACTS

A. Purpose and Application

1. The general purpose of this Program is to help develop and support Minority, Women, and Disadvantaged Business Enterprises (MBE, WBE, and DBE) by providing opportunities for participation in purchase contracts financed entirely with PWC funds.
2. This Program shall apply to purchase contracts over \$30,000 for apparatus, materials, supplies and purchase contracts for goods where the patent-holder is not the sole supplier. PWC General Manager/CEO or its designee will be responsible for monitoring the Program to ensure the goals are met.
3. Where contracts are funded in whole or in part with federal or state funds and the grants, loans, or other funding sources containing MWDBE Program requirements, PWC General Manager/CEO or its designee will be responsible for monitoring the Program to ensure the goals are met.
4. Since PWC purchase contracts are prepared by various departments, each of these departments shall prepare such documents with Procurement pre-approved templates for the quote or bid process, which includes the goals as required to implement this Program. PWC Departments shall document and provide to the MWDBE Program staff a list of all providers notified and responses received for informal purchases.

B. MWDBE Aspirational Goals

1. To implement the purpose of this Program, the goal shall be to award at least four (4) percent of the total of all purchase contract award amounts in each fiscal year to MBEs and at least four (4) percent to WBE firms. It is further the intent of PWC to encourage, to the extent allowed the use of local vendors (defined as located within Cumberland, Hoke, or Harnett County) whenever doing so is consistent with the requirements under G.S. 143-129.

C. Request for Quotes or Invitation for Bids

1. The various departments soliciting goods will be responsible for contacting from the directory at least one MBE and one WBE for a price quotation of \$30,000 or more on each purchase contract with MWDBE availability.

2. A list of available MWDBEs will be provided by the MWDBE Program staff to the Procurement Advisor and Department. The MWDBE Program staff shall track and report the MWDBEs that are notified and that provide submittals.

D. PWC Responsibilities

1. Identification of MWDBEs

- a. The MWDBE Program staff will establish and maintain a directory of certified Minority, Women, and Disadvantaged Business Enterprises. The purpose of the directory is to provide a resource for on PWC purchase contracts. The directory will not constitute a recommendation or endorsement of any listed supplier. The directory will be developed and maintained by the MWDBE Program Staff.
- b. The directory will include:
 - i. Business name, address, telephone number, and email address;
 - ii. Name(s) of business owner(s);
 - iii. NAICS;
 - iv. Type of MWDBE certification, and;
 - v. Certification and expiration date with an acceptable agency.
- c. PWC shall advertise on a contract-by-contract basis throughout the year as deemed necessary for MWDBE outreach. Advertisements shall be placed with minority/women-focused publications (state and local). Notification will also be sent to community organizations which might have knowledge of MWDBE suppliers.
- d. The department heads and MWDBE Program staff should attend local and regional business fairs to promote the MWDBE Program. The departments shall also identify potentially eligible suppliers through affirmative action efforts and the normal course of business. The names of identified suppliers shall be forwarded to the MWDBE Program staff.

2. MWDBE Eligibility Standards – The eligibility of a business is determined by the ownership and control of the business.

- a. An eligible Minority Business Enterprise owner is a citizen or lawful permanent resident of the United States, a member of a recognized ethnic or racial group, and fifty-one (51) percent owner of the business.
- b. The eligible ethnic or racial groups are:
 - i. Black/African American
 - ii. Hispanic American
 - iii. Asian American
 - iv. Native American

- c. An eligible Women Business Enterprise owner is a citizen or lawful resident of the United States and a fifty-one (51) percent owner of the business and is female.
- 3. **Removal of MWDBE Procedures** - A supplier certified as a MWDBE may be removed from the program directory for, but not limited to, any of the following reasons:
 - a. **Change of Status** - PWC General Manager/CEO or its designee may remove a MWDBE if he/she finds that the ownership or control of the business changes so that the business no longer meets the requirements of Section IV, D(2) (b) and (c) above.
 - b. **Failure to comply with the MWDBE Program** - The certification of a business as a MWDBE may be removed by PWC General Manager/CEO or its designee if he/she finds any of the following conditions:
 - i. That a business has submitted inaccurate, false or incomplete information to PWC;
 - ii. That in performance of a contract, a business has failed to comply with requirements of the contract with PWC;
 - iii. That in performance of a contract, a business has failed to comply with MWDBE requirements of a contract established by a contractor with PWC in response to PWC requirements; or
 - iv. That a business has otherwise failed to comply with the provisions of this MWDBE Program.
 - c. **Appeal of Removal** - A business may appeal a determination of a MWDBE by satisfying the eligibility requirements in Section IV, D (2) (b) and (c).
 - d. **Pre-bid Meeting or Site Visit** - PWC may hold a pre-bid meeting on formal and informal bid contracts for all prospective bidders, subcontractors, and MWDBEs for the purpose of explaining the provisions of the MWDBE Program, the process for bidding, and the contract to be performed. Available data on MWDBEs interested and/or capable of engaging in the prospective contract shall be made available to prospective bidders, contractors, and subcontractors.

E. Award of Purchase Contracts

- 1. If a purchase contract is to be awarded, it shall be awarded in accordance with North Carolina General Statutes and/or other applicable PWC, Commission, and State regulations.

VII. PROCEDURES FOR PROFESSIONAL, GENERAL (OTHER) SERVICE CONTRACTS

A. Purpose and Application

1. The general purpose (goal) of this Program is to help develop and support MWDBEs by providing opportunities for participation in the performance of PWC's professional service contracts and general (other) service contracts (hereinafter referred to as service contracts).
2. This Program applies to all service contracts except contracts under \$30,000, and in those unique circumstances where PWC General Manager/CEO or its designee determines that an exception is necessary.
3. Where contracts are funded in whole or in part with federal or state funds and the grants, loans, or other funding sources containing MWDBE Program requirements, PWC General Manager/CEO or its designee will be responsible for monitoring the Program to ensure the goals are met.
4. PWC General Manager/CEO or its designee will be responsible for administering and monitoring the Program to ensure that appropriate action(s) are taken in efforts of achieving the goals.

B. MWDBE Aspirational Goals

1. To implement this Program, the goal shall be to award nine percent (9%) of the total service contract dollars awarded in each fiscal year to MBE firms and four percent (4%) to WBE firms. The goals will become effective on the date that PWC approves the Program and continue for a period of five (5) years.

C. PWC's Responsibilities

1. Identification of MWDBE Firms

- a. The MWDBE Program staff shall establish and maintain a directory of certified MWDBE service providers that shall be made available to all departments to assist them in identifying appropriate MWDBE service providers that can be used to meet PWC's MWDBE goals. The directory shall include the businesses which provide the services routinely procured by PWC and the NAICS which the businesses are capable of providing. The directory will not constitute a recommendation or endorsement of any listed business. The directory will include:
 - i. Business name, address, and telephone number;
 - ii. Name(s) of business owner(s);
 - iii. NAICS of services available;
 - iv. Type of MWDBE certification, and;
 - v. Certification and expiration date with an acceptable agency.
- b. PWC shall provide a list of opportunities at least 30 days prior to each fiscal year (July) for MWDBE service providers. Advertisements shall

be placed with minority/women-focused publications (state and local). Notification will also be sent to community organizations that might have knowledge of MWDBE firms. Interested MWDBEs shall provide a letter of interest within **14 calendar days** of the advertisement.

- c. For opportunities that arise throughout the fiscal year, PWC shall provide an Advertisement for opportunity to but not limited to MWDBE service providers within the MWDBE directory and identified MWDBEs from the Disparity Study. Advertisements shall be placed with minority/women-focused publications (state and local). Notification will also be sent to community organizations that might have knowledge of MWDBE firms. Interested MWDBEs shall provide a letter of interest within **7 calendar days**.
- d. The department heads and MWDBE Program staff should attend local and regional business fairs to promote the MWDBE Program. The departments shall also identify potentially eligible service providers through affirmative action efforts and the normal course of business. The names of identified businesses shall be forwarded to the MWDBE Program staff.

D. Request for Proposals

- 1. MWDBE contract goals shall be set for service contracts over \$30,000.00. The request for proposals shall state the contract goals of four (4) percent for both MWDBE Professional and General Service contractors.
- 2. Contracts under \$30,000 and contracts without letters of interest are not required to meet the contract goal.
- 3. A list of available service providers will be provided by the MWDBE Program staff to the Procurement Advisor(s) and department(s). The MWDBE Program staff shall track and report the service providers that are notified and that provide proposals.

E. Meeting MWDBE Aspirational Goals

- 1. Goals must be met by awarding contracts to certified MWDBE service providers. The MWDBE must be certified at the time of the contract award. MWDBE service providers not certified at the time of the contract award will not be counted towards MWDBE goals. MWDBE goals may be met by a certified joint venture or partnership. In the case of joint ventures or partnerships, MWDBE participation counted toward the goal will be equal to the percentage of the total dollar value of the contract that the MWDBE partner is responsible for performing.

F. Counting MWDBE Participation

- 1. The total dollar value of a contract with a disadvantaged business owned and controlled by a minority woman is counted toward either the minority goal or the goal for women, but not toward both. The contractor or MWDBE Program staff

may choose the goal to which the value is applied.

2. If a determination is made by the MWDBE Program staff that the goals have not been met, the prime service provider will be required to submit a good-faith effort statement prior to PWC awarding the contract.

G. Provider Good-Faith Efforts

The following is a list of the efforts that should be made by the prime service provider to encourage MWDBE participation. In order to receive credit for having made "good faith efforts", the prime service provider should document all actions taken to include the following:

1. Attending pre-bid meetings scheduled by the department;
2. Identifying selected specific items of the project which could be executed by a MWDBE;
3. Soliciting MWDBE service provider participation in a reasonable time before the proposals are due through advertisements in circulation media, trade publications, and minority-focused media;
4. Contacting local firms, firms owned by minorities or women, and associations or business development centers which disseminate information to local businesses and businesses owned by minorities or women in a timely manner to allow sufficient time for MWDBEs to respond;
5. Following up on initial solicitations of interest by contacting the MWDBE to determine whether the MWDBE was interested in performing specific items of the project;
6. Attempting to enter into joint venture or partnership arrangements with MWDBEs and provide interested MWDBEs with information about the requirements for the project;
7. Providing assistance to MWDBEs in the review of proposals and work to be done by sub-service providers;
8. Using available directories of certified MWDBEs and other available resources;
9. Ensuring that the proposer negotiated in good faith with the MWDBE and did not unjustifiably reject as unsatisfactory quotes prepared by any Minority, Women, or Disadvantaged Business Enterprise;
10. Making every effort to obtain Minority, Women, or Disadvantaged Business Enterprise participation that could reasonably be expected to produce a level of participation sufficient to meet the goals of PWC; and
11. Providing interested minority, women, and disadvantaged businesses with information relative to project requirements.

I. Documenting Good-Faith Efforts

If the prime service provider does not meet the goals for MWDBE participation at the time the proposals are due, then the following documents indicating "good-faith efforts" should be submitted as a minimum:

1. A report of all proposals received by the prime service provider from MWDBE sub-providers must indicate the action taken by the prime service provider in response to the proposal. In cases where proposals have been rejected, the reason for rejection must be indicated.
2. Documentation of efforts to enter into agreements with MWDBEs for sub-provider work or arrangements for joint ventures, partnerships, or other multi-entity relationships. Also included should be a statement of why agreements or arrangements were not made.
3. Proof of contact with MWDBEs and associations or business development centers that disseminate information to MWDBEs.
4. A copy of emails or notices sent to groups in Section VI, J(3) above notifying them of the firm's intent to submit a qualification submittal to PWC. The emails or notices should indicate the areas of work available for sub-providers.
5. Description of assistance provided to MWDBEs in review of the qualification submittal and work to be done by the sub-provider.
6. Description on use made by firms of available resources such as directories of MWDBEs.
7. Documentation of advertisements sent to general circulation media, trade publications, and minority-focused media.
8. Proof of attendance at any pre-bid meeting.

If the prime service provider fails to meet the MWDBE goals with its proposed project team and cannot provide documentation of "good-faith efforts", these failures will be noted to the involved department by the MWDBE Program Staff, and the service provider may be disqualified.

VIII. UTILIZATION OF JOINT VENTURE

PWC is committed to promoting the utilization of joint venturing amongst business enterprises and to support, encourage, and offer procurement opportunities to support utilization when available so that business enterprises can meet capacity development.

The purpose of Joint Venturing is to connect high potential MWDBEs with a Prime Contractor that will supplement their growth and development. Joint Venturing is seen as an important approach to help MWDBEs compete for larger contracts. PWC conducts many outreach events to connect certified MWDBEs with PWC decision makers and prime contractors. PWC shall provide targeted outreach, training, and technical support

to MWDBEs and urge Prime contractors to provide an equivalent level of outreach and support when joint venturing is available. PWC's mission is to provide an innovative program to the industry that focuses on the accelerated growth of diverse partnerships.

IX. MWDBE REPORTING PROCEDURE

1. The MWDBE Program staff shall submit quarterly progress reports to PWC Departments. The quarterly progress reports shall be prepared by the MWDBE Program staff from information (i.e. pay applications, MWDBE forms, and requisition checklist form) submitted by each department involved in procurement within thirty (30) days following the period (each quarter). Progress reports shall indicate the type of procurement contract (i.e., construction, A&E, purchase, professional services, or general services) and shall include the following:
 - vi. Number and dollar value of total procurement contracts;
 - vii. Number and dollar value of all procurement contracts awarded to MWDBEs by the department;
 - viii. Where goals are not met, the progress report shall specify the reasons and include recommendations for increasing participation.
2. PWC General Manager/CEO or its designee shall submit an annual report to Commission. The report shall include the total number of procurement contracts by departments and the dollar value of all contracts with MWDBE participation. The level of MWDBE participation shall be reported annually.

**FAYETTEVILLE PUBLIC WORKS COMMISSION'S
MWDBE COMPLIANCE PROVISIONS**

APPLICATION:

The requirements of Fayetteville Public Works Commission (PWC) Minority, Women, and Disadvantaged Business Enterprise (MWDBE) Program for participation specific contracts are hereby made part of the Contract Documents. Copies of the Program may be obtained from:

Fayetteville Public Works Commission
Economic Inclusion Programs
P.O. Box 1089
Fayetteville, North Carolina 28302
Phone (910) 223-4016 Fax (910) 483-1429
E-mail: EIProgram@faypwc.com

NCDOT DBE Directory: www.ebs.nc.gov/VendorDirectory

HUB Directory: <https://ncadmin.nc.gov/businesses/hub>

MWDBE Compliance Requirements:

1. The Bidder shall provide, with their Bid Form, at the time bids are due, the documents set forth below, properly executed. Returning executed copies indicates and establishes that the Bidder understands and agrees to any incorporated MWDBE contract provisions.
2. All Bidders must provide with their Bid Form, at the time bids are due, a properly completed and executed copy of **either:**
 - Affidavit A – Listing of Good-Faith Efforts **OR**
 - *Affidavit B – Intent to Self-Perform with Own Workforce.

*Affidavit B should **only** be used if the Contractor will perform **ALL Elements** of the Work on this project with their own forces **AND** will complete **ALL Elements** of this project **WITHOUT** the use of subcontractors, material suppliers, or providers of professional services.
3. Upon being identified as the apparent lowest responsive, responsible Bidder, a Bidder shall, within twenty-four (24) hours of PWC's notification provide a properly completed and executed copy of **either:**
 - Affidavit C – Percentage of MWDBE Participation **OR**
 - Affidavit D – Good-Faith Efforts.
4. All Bidders must provide with their Bid Form, at the time bids are due, a properly completed and executed copy of Affidavit E- Identification of MWDBE/Local Participation Form

All written statements, certifications, or intentions made by the Bidder shall become a part of the agreement between the Contractor and Fayetteville Public Works Commission for performance of this contract.

SUBCONTRACTOR PAYMENT REQUIREMENTS:

North Carolina General Statutes 143-134.1 (N.C.G.S.) states that the percentage of retainage on payments made by the prime contractor to the subcontractor shall not exceed the percentage of retainage on payments made by the Fayetteville Public Works Commission to the prime contractor. Failure to comply with this provision shall be considered a breach of the contract, and the contract may be terminated in accordance with the termination provisions of the contract.

The Contractor shall provide an itemized statement of payments to each MWDBE subcontractor before final payment is processed.

The Contractor shall provide an itemized statement of payments to each NON-MWDBE subcontractor before final payment is processed.

Contractor

Signature

Printed Name

Title

Date

Affidavit A: Listing of the Good Faith Efforts

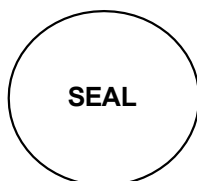
Affidavit of _____
(Name of Bidder)

I have made a good faith effort to comply under the following areas checked:

Points		
Total Available GFE Points: 155		Minimum Number GFE Points Required: 50
	10	Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government-maintained lists at least 10 days before the bid or proposal date and notifying them of the nature and scope of the work to be performed.
	10	Making the construction plans, specifications and requirements available for review by prospective minority businesses or providing these documents to them at least 10 days before the bid or proposals are due.
	15	Breaking down or combining elements of work into economically feasible units to facilitate minority participation.
	10	Working with minority trade, community, or contractor organizations identified by the Office for Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
	10	Attending any pre-bid meetings scheduled by the public owner.
	20	Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors.
	15	Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
	25	Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
	20	Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
	20	Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.
Total GFE Points (Claimed by Bidder):		Total GFE Points (Assessed by PWC):

In accordance with NCGS 143-128.2(d) the undersigned will enter into a formal agreement with the firms listed in the Identification of Small Disadvantaged Business Participation schedule conditional upon execution of a contract with the Owner. Failure to abide by any applicable statutory provision may constitute a breach of the contract. The undersigned hereby certifies that he or she has read the terms of the MWDBE business commitment and is authorized to bind the Bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____



State of North Carolina, County of _____

Subscribed and sworn to before me this _____ day of
20____ Notary Public

My commission expires _____

Affidavit B: Intent to Perform Contract with Own Workforce

Affidavit of _____
(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for contract:

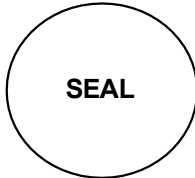
(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform **all elements of the work** on this project with his/her own current workforces; and will complete all elements of this project **without** the use of subcontractors, material suppliers, or providers of professional services.

The Bidder agrees to provide any additional information or documentation requested by the Owner in support of the above statement.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: _____ Name of Authorized Officer: _____



State of North Carolina, County of _____

Subscribed and sworn to before me this _____ day of 20____

Notary Public _____

My commission expires _____

Affidavit C: Percentage of MWDBE Participation

Affidavit of _____
(Name of Bidder)

I hereby certify that on contract: _____
(Name of Project)

\$ _____
(Dollar Amount of Total Bid)

I will expend a minimum of _____% of the total dollar amount of the contract with Minority, Women, and Disadvantaged Business Enterprises (MWDBE). MWDBEs will be employed as subcontractors, vendors, or providers of professional services. Such work will be subcontracted to the following firms listed below.

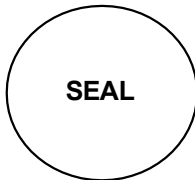
<u>Name, Address, & Phone No.</u>	<u>*MWDBE Category</u>	<u>NAICS</u>	<u>Dollar Value</u>	<u>% of Contract</u>

*MWDBE categories: Black-African Americans (B), Hispanic-Americans (H), Asian- Americans (A), Native-Americans (I), Women (F), Socially/Economically Disadvantaged (D)

Pursuant to NCGS 143-128.2(d), the undersigned will enter into a formal agreement with MWDBEs for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the Bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____



State of North Carolina, County of _____

Subscribed and sworn to before me this _____ day _____ 20____

Notary Public _____

My commission expires _____

Affidavit D: Good Faith Efforts

If Owner determines using reasonable discretion that Affidavit C is insufficient, Bidder agrees to provide the following information regarding any good-faith efforts.

<u>Name, Address, & Phone No.</u>	<u>*MWDBE Category</u>	<u>NAICS</u>	<u>Dollar Value</u>

*MWDBE categories: Black-African Americans (B), Hispanic-Americans (H), Asian- Americans (A), Native-Americans (I), Women (F), Socially/Economically Disadvantaged (D)

Bidder may be requested to provide documentation of the Bidder's good-faith efforts. Examples of documentation may include the following:

- a. Copies of solicitations for quotes to MWDBEs. Each solicitation may include a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- b. Copies of quotes or responses received from each firm responding to the solicitation.
- c. A telephone log of follow-up calls to each firm sent a solicitation.
- d. For subcontracts where a MWDBE is not considered the lowest responsible sub- bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- e. Documentation of any contacts or correspondence to MWDBE, community or contractor organizations in an attempt to meet the goal.
- f. Copy of pre-bid roster.
- g. Letter documenting efforts to provide assistance in obtaining required bonding or insurance for MWDBEs.
- h. Letter detailing reasons for rejection of a MWDBE due to lack of qualification.
- i. Letter documenting proposed assistance offered to MWDBEs in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive Bidder.

Date: _____ Name of Authorized Officer: _____



State of North Carolina, County of _____

Subscribed and sworn to before me this _____ day _____ 20____

Notary Public _____

My commission expires _____

Affidavit E: Identification of MWDBE/Local Participation

(Name of Bidder)

I hereby certify that on contract: _____

(Name of Project)

We will use the following Minority, Women, and Disadvantaged Business Enterprises (MWDBE), and Local (Cumberland, Hoke, Harnett County) as construction subcontractors, vendors, suppliers, or providers of professional services.

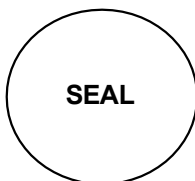
<u>Name, Address, & Phone No.</u>	<u>*MWDBE Category / **Local</u>	<u>NAICS</u>	<u>Dollar Value</u>

*MWDBE categories: Black-African Americans (B), Hispanic-Americans (H), Asian- Americans (A), Native-Americans (I), Women (F), Socially/Economically Disadvantaged (D)

**Local: Fayetteville Metropolitan Statistical Area (MSA) comprising of Cumberland County, Hoke County, and Harnett County. PWC is requesting this information for reporting purposes only, and use of local entities will not be considered for compliance with the requirements of the MWDBE Program.

The total value of MWDBE/local business contracting will be \$_____

Date: _____ Name of Authorized Officer: _____



State of North Carolina, County of _____

Subscribed and sworn to before me this _____ day _____ 20____

Notary Public _____

My commission expires _____

**FAYETTEVILLE PUBLIC WORKS COMMISSION
MWDBE ADD / CHANGE FORM**

If a MWDBE subcontractor fails to complete work under the subcontract for any reason, the recipient must require the prime contractor to employ the good faith efforts set forth in the MWDBE Program if soliciting a replacement or additional subcontractor.

For MWDBE Change Request, please provide all information below:

Prime Contractor: _____

Subcontracted Work: _____

Previous Subcontractor: _____

Reason this for change request:

New Subcontractor: _____ MWDBE Category: _____

To Add MWDBE Subcontractor/Subcontracted work:

If this is a new trade being subcontracted or a subcontractor that was not documented in the original Project Bid Information submittal, then good faith efforts to solicit a MWDBE must be documented, as the original MWDBE instructions indicate. Please provide all good faith efforts below showing all the MWDBE firms contacted to perform this work along with any additional good faith efforts or evidence that there are not reasonably available firms in the work area. PWC's MWDBE Program requires that good faith efforts are to be carried out to the fullest extent practicable. If solicitations were not carried out due to being impracticable, please attach this explanation to this form.

Name, Address, & Contact Information	MBE or WBE and Certifying agency	How was this firm contacted (email, letter, or Phone) and what was the result of the solicitation? *

*Must submit copies of emails or letters. If phone calls were made this sheet can serve as documentation of calls

Date: _____ Name of Authorized Officer: _____



State of North Carolina, County of _____

Subscribed and sworn to before me this _____ day _____ 20____

Notary Public _____

My commission expires _____

**SMALL LOCAL SUPPLIER / MWDBE SUBCONTRACTOR
DISCLOSURE FORM**

Contractor: _____

Address & Phone: _____

Project: _____

Name: _____

Pay Application # _____

Please complete the below form by providing the necessary information for the payments made to each subcontractor, vendor, or supplier for the work associated with the identified pay application. This form must be fully completed and attached to each pay application.

Firm Name, Address, and Contact Information	Payment Amount	Type of Work/Commodity (Include NAICS Code)

Signature

_____, _____
Printed Name Title

Date

SECTION B - CONTRACT EXECUTION DOCUMENTS

***** THIS PAGE WAS INTENTIONALLY LEFT BLANK *****

NOTICE OF AWARD

TO: _____

PROJECT DESCRIPTION: PWC2425072 - COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK

The OWNER has considered the BID submitted by you for the above described work in response to its Advertisement for Bids dated _____ and Instructions to Bidders.

You are hereby notified that your BID has been accepted for items in the amount of
\$_____.

You are required by the Instructions to Bidders to execute the Agreement and furnish the required Performance Bond, Payment Bond, and Certificates of Insurance within ten (10) calendar days from the date of this NOTICE to you.

If you fail to execute said Agreement and to furnish said Bonds within ten (10) days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the OWNER's acceptance of your BID as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 2025.

**OWNER: FAYETTEVILLE PUBLIC WORKS COMMISSION
 FAYETTEVILLE, NC**

**BY: Nikole Bohannon
TITLE: Procurement Manager**

ACCEPTANCE OF AWARD

**PWC2425072 - COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER
STORAGE TANK**

Receipt of the preceding NOTICE OF AWARD is hereby acknowledged this the _____
day of _____, 2025.

(CONTRACTOR)

By: _____

Title: _____

- END OF SECTION -

State of North Carolina
Cumberland County

CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT ("Agreement" or "Contract") is made by and between the Fayetteville Public Works Commission ("PWC"), a North Carolina public authority, and [REDACTED] [PER THE CHARTER (SEE SEC 6A.20), THE CONSTRUCTION CONTRACT, IF MORE THAN \$500K, MUST BE BETWEEN THE CITY (BY AND THROUGH PWC) AND THE CONTRACTOR], ("Contractor"), a [REDACTED] (each of PWC and Contractor is a "Party" and both are collectively the "Parties") as of the date of execution last written below (the "Effective Date"). The Parties agree as follows:

1. The Construction Project. Contractor shall furnish and bear solely the entire cost of all labor and materials necessary for the construction and/or renovation of the Project (defined hereinbelow) as specified in the Contract Documents (defined hereinbelow) and complete all Work on the Project in a Workmanlike manner in strict accordance with the Contract Documents, schedule delivery of the new materials, furnish and bear solely the entire cost of all supervision, contract administration, equipment, tools, and other means necessary to complete the Project, perform every obligation imposed by the Contract Documents, and be solely responsible for the clean-up and disposal of all materials and debris relating to or arising from the construction and renovation, subject to any exceptions that are specifically set forth in the Contract Documents. Except as otherwise specifically provided in the Contract Documents, Contractor is solely responsible for all construction means, methods, techniques, sequences, procedures, safety precautions or programs, supervising, coordinating, and performing all the Work necessary to complete the Project; provided, however, PWC shall have the right, without incurring any liability to the Contractor, to suspend Contractor's performance when a PWC employee, in his or her opinion, observes a safety violation involving a threat to life or imminent danger of bodily injury, and the suspension shall remain in effect until Contractor remedies the safety violation.

2. Terms. Capitalized terms used in this Agreement have the meaning specified below:

"Business Day" means each calendar day that is not a Saturday, Sunday, holiday observed by the federal government for its employees, or holiday observed by the State of North Carolina for its employees.

"Completion of the Project" means: (i) the Project is completed in accordance with this Agreement, except for punch list items; (ii) PWC has received any required temporary or final certificate of occupancy from the governmental agency with jurisdiction over the Project; and (iii) the registered architects or engineers (the "Designer(s)") who designed portions or components of the Project have issued certificates of Completion of the Project as to those portions or components.

"Contract Documents" means the following documents that were either made available to Contractor by PWC during the bid solicitation process (including Drawings) or executed by the Parties or both, which are all incorporated by reference herein:

- a. This Agreement
- b. General Conditions
- c. Bid Submittal Documents
- d. Contractor's Submitted Bid
- e. Bid Bond
- f. [Form of Exceptions]
- g. Notice of Award
- h. Acceptance of Award
- i. Performance Bond
- j. Payment Bond
- k. Copy of General Contractor's License
- l. Power of Attorney
- m. Certificate of Insurance
- n. Section C – Administrative Provisions
- o. Section D - Technical Specifications
- p. [Additional Specifications]
- q. [Appendices]

The following documents may be delivered or issued on or after the Effective Date of the Agreement and may not be attached to this Agreement, but are considered Contract Documents when executed by the Parties:

- r. Notice to Proceed and Acceptance of Notice
- s. Work Change Directive(s)
- t. Change Order(s)
- u. Field Order(s)

There are no Contract Documents other than those identified in this Agreement. The Contract Documents may only be amended, modified, or supplemented as provided in this Agreement in a writing signed by the Parties.

"Fault" means a breach of contract by Contractor, negligent, reckless, or intentional act(s) or omission(s) constituting a tort under applicable statutes or common law by one or more Responsible Persons, or violation(s) of applicable statute(s) or regulation(s) by a Responsible Person.

"Project" means _____, as more specifically set forth in the Contract Documents.

"Responsible Person" means the Contractor and each of its employees, agents, representatives, subcontractors, or other persons and entities for which Contractor may be liable or responsible as a result of any statutory, tort, or contractual duty.

The terms used in this Agreement shall have the meaning as stated herein and in the General Conditions. In the event of a conflict between the terms of this Agreement and any other component(s) of the Contract Documents, the terms of this Agreement shall govern.

3. Contract Price. PWC shall pay Contractor for Completion of the Project in accordance with the Contract Documents the amount identified in the accepted Bid Form of Contractor, being in the total amount of \$ [REDACTED] (the "Price"). Contractor understands and acknowledges that the Price is derived from a specific appropriation of funds provided for the Project. Contractor agrees and acknowledges the Price is equal to the aggregate cost of all Work to be done on the Project, including all labor, materials, equipment, apparatus, and supplies, and Contractor's overhead and profits, if any, set in accordance with the amount specified on the Bid Form submitted by Contractor and accepted by PWC.

4. Contract Times. The Parties shall perform their obligations under this Agreement in compliance with all scheduling deadlines set forth in the Contract Documents. The Contractor shall commence the Work to be performed under this Agreement on a date to be specified in accordance with the Notice to Proceed issued by PWC. Contractor shall achieve Completion of the Project no later than 360 consecutive calendar days from said date plus any modifications thereof allowed in accordance with the Contract Documents (the "Completion Date").

5. Payment. PWC shall pay Contractor in installment payments plus a final payment, as set forth in the Contract Documents. For each applicable installment payment, Contractor shall submit an application for payment in accordance with the Contract Documents. An application for payment will be processed by PWC as provided in the Contract Documents. Such installment payments shall reflect the actual Cost of the Work, not to exceed in total the Price, and the allocable portion of the total Price for said installment. PWC shall make payment to the Contractor, less any applicable retainage set forth in the Contract Documents; provided, however, that PWC may withhold all or a portion of a payment on account of (1) incomplete Work, (2) defective or nonconforming Work, (3) claims filed on a reasonable basis to believe that such claims will be filed imminently, (4) failure of the Contractor to make payments properly for labor, services, materials, equipment or subcontracts or in the event that any subcontractor or materialmen files a lien against PWC's assets of the Project for Contractor's failure to pay same, (5) damages caused to PWC or another party by one or more Responsible Persons, or (6) failure to comply with the terms and conditions of this Agreement. In the final payment, PWC shall pay the balance of the Price, including all retained amounts, less any Liquidated Damages and other applicable damage and claim amounts, to Contractor within forty-five (45) days of Completion of the Project; provided, however, that PWC may withhold a reasonable sum from the final payment to ensure correction of any final items or condition on the Project.

Contractor shall, upon each pay request under this Agreement, furnish to PWC all invoices or copies of invoices for all materials purchased for said Work within pay request period, and such invoices shall state the amount of North Carolina Sales Tax paid for said materials; and Contractor shall also furnish PWC an affidavit certifying the total costs of materials purchased for all Work performed within pay request period under this Agreement and the total amount of North Carolina Sales Tax paid for said materials. Contractor shall further comply with all requirements relating to sales and use taxes set forth in the Instructions to Bidders and other Contract Documents.

6. Retainage. Subject to any restrictions applicable to any federal grant funds that may be utilized for the Project, PWC may, in its discretion, retain up to five percent (5%) of any periodic payment due Contractor; provided, however, when the Project is fifty percent (50%) complete, PWC, with written consent of the surety, shall not retain any further retainage from periodic payments due Contractor if Contractor continues to perform satisfactorily and any nonconforming Work identified in writing prior to that time by PWC or the Designer has been

corrected by Contractor and accepted by PWC or the Designer, and provided further that full payment, less authorized deductions, shall also be made for those line item trades that have reached one hundred percent (100%) completion of their contract obligations by or before the Project is fifty percent (50%) complete if Contractor has performed satisfactorily in accordance with G.S. 143-134.1(b2), contingent upon PWC's receipt of an approval or certification from the Designer that the Work performed by the subcontractor is acceptable and in accordance with the Contract Documents. If PWC determines Contractor's performance is unsatisfactory, PWC may, in its discretion, reinstate retainage for each subsequent periodic application for payment as authorized in this Section up to the maximum amount of five percent (5%). The Project shall be deemed fifty percent (50%) complete when Contractor's gross project invoices, excluding the value of materials stored off-site, equal or exceed fifty percent (50%) of the Price, except the value of materials stored on-site shall not exceed twenty percent (20%) of Contractor's gross project invoices for the purpose of determining whether the Project is fifty percent (50%) complete. Within 60 days after the submission of a pay request and one of the following occurs, as specified in the Contract Documents, PWC, with written consent of the surety, shall release to Contractor all retainage on payments held by PWC: (i) PWC receives a certificate of Substantial Completion from the Designer in charge of the Project; or (ii) PWC receives beneficial occupancy or use of the Project; provided, however, PWC may in its discretion retain sufficient funds to secure Completion of the Project or corrections on any Work. If PWC retains funds, the amount retained shall not exceed two and one-half times the estimated value of the Work to be completed or corrected. Any reduction in the amount of the retainage on payments shall be with the consent of Contractor's surety. The existence of any third-party claims against Contractor or any additive change orders to the Construction Documents shall not be a basis for delaying the release of any retainage on payments. Notwithstanding anything in this Section to the contrary, following fifty percent (50%) completion of the Project, PWC shall be authorized to withhold additional retainage from a subsequent periodic payment, not to exceed five percent (5%), in order to allow PWC to retain two and one-half percent (2.5%) total retainage through the Completion of the Project. In the event that PWC elects to withhold additional retainage on any periodic payment subsequent to release of retainage on a line-item of Work pursuant to G.S. 143-134.1(b2), Contractor may also withhold from the subcontractors remaining on the project sufficient retainage to offset the additional retainage held by PWC, notwithstanding the actual percentage of retainage withheld by PWC of the Project as a whole. Neither PWC's nor Contractor's release of retainage on payments as part of a payment in full on a line-item of Work pursuant to G.S. 143-134.1(b2) shall affect any applicable warranties on Work done by Contractor or subcontractor, and the warranties shall not begin to run any earlier than either PWC's receipt of a certificate of Substantial Completion from the Designer in charge of the Project or PWC receives beneficial occupancy.

7. Liquidated Damages. Time is of the essence with respect to performance of each of the Parties' obligations under this Agreement. Contractor recognizes and acknowledges that PWC will suffer irreparable financial harm and other losses if the Project is not completed by the Completion Date. The Parties recognize and agree that the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding may not accurately reflect the actual loss suffered by PWC if the Project is not completed by the Completion Date. Accordingly, instead of requiring any such proof, Contractor and PWC agree that in the event Contractor fails to achieve Completion of the Project by the Completion Date, Contractor shall pay to PWC as liquidated damages to compensate PWC for damages related to the delayed Completion of the Project in an amount equal to one thousand dollars (\$1000.00) per day ("Liquidated Damages") for each calendar day Contractor fails to achieve Completion of the Project by the Completion Date.

8. Contractor's Representations and Warranties. In order to induce PWC to enter into this Agreement, Contractor makes the following representations and warranties to PWC:

a. Contractor is duly licensed in the State of North Carolina to complete all Work necessary for the Project with an unlimited license or of sufficient limit in excess of the Price, is duly organized, validly existing and in good standing and has all requisite powers, rights, and authority to execute, enter into, and perform this Agreement in accordance with the terms and conditions of this Agreement, and this Agreement constitutes a legal, valid, and binding obligation of Contractor enforceable against it in accordance with its terms.

b. Contractor has read the Contract Documents, and acknowledges and understands all data, materials, specifications, and requirements identified in the Contract Documents.

c. Contractor has visited the site for the Project, conducted a thorough, visual examination of the site and adjacent areas, and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, and performance in completing the Project. Contractor is familiar with and is satisfied as to all laws and regulations that may affect cost, progress, and performance to complete the Project.

d. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the site and all drawings of physical conditions relating to existing surface or subsurface structures at the site that have been identified in the Contract Documents and any accompanying reports and drawings, and (2) reports and drawings relating to hazardous environmental conditions, if any, at or adjacent to the site that have been identified in the Contract Documents and any accompanying reports and drawings.

e. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, if any, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.

f. Based on the information and observations referred to in subsection e. of this Section, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Price commencing on the commencement date and in accordance with the other terms and conditions of the Contract.

g. Contractor is aware of the general nature of Work to be performed by PWC and others at the Site that relates to the Work as indicated in the Contract Documents.

h. Contractor has given PWC's Designer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in

the Contract Documents, and the written resolution thereof by the Designer is acceptable to Contractor.

i. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

j. Contractor's entry into this Agreement constitutes an incontrovertible representation by Contractor that, without exception, all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

k. Contractor has no business or personal relationship with any PWC Commissioner, officer, director, manager, or supervisor and Contractor covenants to disclose immediately to PWC any such relationship that develops during the performance of Work on the Project.

9. Contractor's Payment Obligations. Contractor shall pay all of its obligations arising out of or in connection with the Project in a timely manner to all persons supplying materials in the prosecution of the Work and to all laborers and others employed thereon.

10. Performance and Payment Bonds. Contractor shall obtain and deliver to PWC a performance bond in the amount of one hundred percent (100%) of the Price, conditioned upon the faithful performance of the Project and all Work in accordance with the Contract Documents, which bond shall be solely for the protection of PWC. Contractor shall obtain and deliver to PWC a payment bond in the amount of one hundred percent (100%) of the Price, conditioned upon the prompt payment for all labor or materials for which the Contractor or one or more of its subcontractors is liable, which payment bond shall be solely for the protection of the persons furnishing materials or performing labor for which the Contractor is liable. The performance bond and the payment bond shall be executed by one or more surety companies legally authorized to do business in the State of North Carolina, shall become effective upon the awarding of the construction contract by PWC to Contractor, and shall at all times comply with the requirements set forth in Article 3 of North Carolina General Statutes Chapter 44A. In the event PWC deems the surety or sureties upon any bond necessary for this Agreement and the completion of the Project, or if for any reason, such bond ceases to be adequate to cover the performance and/or payment of the Work, Contractor shall, at its expense, within five (5) days after the receipt of notice from PWC, furnish an additional bond or bonds in such form and amount, and with such surety or sureties as shall be satisfactory to PWC. In such event no further payment to Contractor shall be deemed to be due under this Agreement until new or additional security for the performance and payment of the Project shall be furnished in manner and form satisfactory to PWC. Contractor understands and acknowledges that PWC, as a public authority, is not subject to the provisions of Articles 1 and 2 of Chapter 44A of the General Statutes, in accordance with G.S. 44A-34 and applicable law.

11. Contractor's Damage Repair Obligations. Contractor shall be responsible for all damages to the property of the City of Fayetteville and of PWC that may result from the normal procedure of a Responsible Person's actions in the prosecution of the Work or that may be caused by or result from the negligence of a Responsible Person during the progress of or connected with the prosecution of the Work, whether within the limits of the Work or elsewhere. Contractor shall promptly restore all such property so damaged to a condition as good as it was immediately prior to Contractor initiating the Work on the Project.

12. Defective Work. The Project shall be subject to observation and approval by PWC, Designer, and representatives of governmental agencies with jurisdiction over the Project. PWC and Designer shall be entitled to enter at all reasonable times the premises subject to construction or renovation to inspect the Work performed by or on behalf of Contractor, provided that such entry and inspection does not materially interfere with the progress of construction. Contractor shall correct promptly, at no cost to PWC, all Work reasonably rejected by PWC or by its representatives. Should Contractor fail to correct rejected Work, PWC may, acting in its sole discretion, correct such Work and the Contractor shall pay PWC's actual costs of correction and any other applicable amounts identified in the Contract Documents.

13. As-Built Drawings. Contractor shall maintain during the progress of the Project as-built drawings indicating the current status of the Project as actually performed. Upon Completion of the Project, Contractor shall prepare a final version compliant with American Land Title Association (ALTA) standards and prudent industry standards related to stamped engineering drawings, of such as-built drawings of the Project at the premises and submit them to PWC for approval.

14. Assignment. This Agreement shall be binding upon and inure to the benefit of the Parties, their legal representatives, successors, and assigns. Contractor may not assign, transfer, convey, or encumber, whether voluntarily or by operation of law, this Agreement or any obligations, rights under, or interests in this Agreement to a third party without the prior written consent of PWC; and, specifically, but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

15. Indemnity. Contractor shall indemnify, defend, and hold harmless PWC and its Commissioners, officers, employees, agents, and representatives and the City of Fayetteville and its elected officials, managers, employees, agents, and representatives and Design Engineer (collectively "Indemnitees") from and against all claims, actions, liabilities, damages, losses, costs, and expenses (including, without limitation, injury to or death of any persons and damage to property, economic and consequential damages and attorneys' fees) asserted by one or more third parties against one or more of the Indemnitees if the Fault of one or more Responsible Persons is a proximate cause of the loss, damage, or expense indemnified. Contractor's obligation to indemnify, defend, and hold harmless the Indemnitees shall survive the termination of this Agreement.

16. Insurance. Contractor shall maintain, and inure that all subcontractors shall maintain, during the Work and for at least three (3) years following Completion of the Project the insurance coverage set forth in the Contract Documents, which insurance shall be placed with insurance companies authorized to do business in the State of North Carolina and rated A minus VII or better by the current edition of Best's Key Rating Guide or otherwise approved in writing by PWC. Prior to initiating any Work, Contractor shall deliver certificates of insurance confirming each such coverage required by the Contract Documents, and Contractor shall direct its insurers to provide annually to PWC certificates confirming each such coverage during the coverage period. PWC shall be named as an additional insured in the comprehensive automobile and commercial liability insurance policies. Commercial general liability coverage shall be written on an "occurrence" basis. Contractor shall not reduce or allow the required

insurance coverages to lapse without PWC's prior written approval. All policies for insurance must be endorsed to contain a provision giving PWC a thirty (30) calendar day prior written notice by certified mail of any cancellation of that policy or material reduction in coverage. Should a notice of cancellation be issued for non- payment of premiums or any part thereof, or should Contractor fail to provide and maintain certificates as set forth herein, PWC shall have the right, but shall not have the obligation, to pay such premium to the insurance company or to obtain such coverage and to deduct such payment from any sums that may be due or become due to Contractor, or to seek reimbursement for said payments from Contractor. Any such sums paid by PWC shall be due and payable immediately by Contractor upon notice from PWC. The insurance provisions of this Agreement shall not be construed as a limitation on Contractor's responsibilities and liabilities pursuant to the terms and conditions of this Agreement. Contractor's obligation to maintain insurance for three (3) years after Completion of the Project shall survive the termination of this Agreement.

17. Warranty. The Contractor hereby grants to PWC a warranty on all materials and workmanship involved in the Project for a period of one (1) year from the Completion Date and a period of two (2) years from the Completion Date for any latent structural defects. PWC shall give written notice to Contractor of any claim under this Section within the time specified hereinabove. At Completion, Contractor shall transfer and/or assign to PWC all manufacturer warranties held by Contractor and its subcontractors for materials purchased for the Project and Contractor shall take all required actions to effectuate such transfer(s) and/or assignment(s). These warranties shall be in addition to, and not in derogation of, all other rights and privileges which PWC may have under law, equity, or instrument, and shall survive the Completion Date and the final settlement and shall be binding on Contractor notwithstanding any provision in any other writing executed by PWC heretofore or contemporaneous with the execution of the Agreement or prior to the Completion Date.

18. Waiver. No failure on the part of any party to exercise, and no delay in exercising, any right, power, or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right hereunder preclude any other or further cumulative and not exclusive of any remedies provided by law. This Agreement shall be binding upon and inure to the benefit of the parties, their legal representatives, successors, and assigns. This Agreement may not be assigned, transferred, conveyed, or encumbered, whether voluntarily or by operation of law, by either party without the prior written consent of the other party, which consent shall not be unreasonably withheld.

19. Dispute Resolution. Any party allowed to use the dispute resolution ("DR") process adopted by the State Building Commission pursuant to G. S. 143-135.26(11) and G. S. 143-128(f1) shall participate in mediation pursuant to the DR process as a precondition to initiating litigation concerning the dispute. The amount of \$15,000 or more must be at issue before a party may require other parties to participate in the DR process. The costs of the DR process shall be divided between the parties to the dispute with at least one-third of the cost to be paid by PWC, if PWC is a party to the dispute. Contractor and PWC shall not be obligated to use arbitration to settle any controversy or claim arising out of or related to the Contract or the breach thereof. Any provision in any place in the Contract Documents to the effect that either of those parties is bound by arbitration is void. PWC and Contractor agree to negotiate any claims in good faith, and if they cannot do so in accordance with this Section, then they shall resolve the claim by the institution of legal or equitable proceedings by either party.

20. Law. (a) THIS AGREEMENT SHALL BE DEEMED MADE IN CUMBERLAND COUNTY, NORTH CAROLNA AND SHALL BE GOVERNED BY AND INTERPRETED AND

ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NORTH CAROLINA WITHOUT GIVING EFFECT TO THE CHOICE OF LAW PROVISIONS THEREOF. The Contractor shall at all times comply with all applicable Federal, state, and local laws and building codes in the performance of its obligations under the Agreement. The exclusive forum and venue for all actions arising out of this Contract shall be the North Carolina General Court of Justice, in Cumberland County. Such actions shall neither be commenced in nor removed to federal court. This subsection (a) shall not apply to subsequent actions to enforce a judgment entered in actions heard pursuant to this subsection.

(b) If the Contractor is not a natural person (for instance, Contractor is a corporation or limited liability company), this subsection (ii) applies. "Agent for Service of Process" means every person now or hereafter appointed by Contractor to be served or to accept service of process in any State of the United States. Contractor hereby appoints as one of those agents the person it designates to receive notice pursuant to Section 21 (Notices). Without excluding any other method of service authorized by law, Contractor agrees that every Agent for Service of Process is designated as its non-exclusive agent for service of process, summons, and complaint. Contractor will instruct each Agent for Service of Process that after such agent receives the process, summons, or complaint, such agent shall promptly send it to Contractor. This subsection (b) does not apply while Contractor maintains a registered agent in North Carolina with the office of the North Carolina Secretary of State and such registered agent can be found with due diligence at the registered office.

21. Execution; Modification; Entire Agreement; Severability. This Agreement may be executed in counterparts with the same effect as if the signatures to each counterpart were upon a single instrument, and all such counterparts together shall be deemed an original of this Agreement. For purposes of this Agreement, a facsimile copy or scanned copy or photocopy of a party's signature shall be sufficient to bind such party. This Agreement shall be subject to execution by electronic means in accordance with Article 40 of Chapter 66 of the North Carolina General Statutes. No oral communication, promise, understanding, or agreement before, contemporaneous with, or after the execution of this Agreement shall affect or modify any of the terms and conditions and obligations of the Contract Documents. The Contract Documents shall be modified only by a subsequent writing signed by both Parties. The Contract Documents shall be conclusively considered to contain and express all the terms and conditions agreed upon by the Parties, notwithstanding any prior or contemporaneous written communication, promise, understanding or agreement. Should any provision of this Agreement or any of the Contract Documents at any time be in conflict with any law, statute, rule, regulation, order, or ruling and thus be unenforceable, or be unenforceable for any other reason, then the remaining provisions of this Agreement shall remain in full force and effect and the court or arbitrator shall give the offending provision the fullest meaning and effect permitted by law. The titles of the Sections throughout this Agreement are for convenience only and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction, or meaning of the provisions of this instrument.

22. Notices. Any notice which either Party is required or desires to give the other hereunder shall be deemed sufficiently given if, in writing, it is delivered personally, or sent by certified U.S. mail, return-receipt requested, postage prepaid, to the addresses listed herein below, or such other address as either Party shall give to the other Party by written notice in accordance herewith. Any notice given herein by personal delivery shall be deemed delivered when received. Any properly addressed notice given herein by certified mail shall be deemed delivered on third Business Day after the same is deposited in an official United States Post Office, postage prepaid, or if sooner upon the date when the return receipt therefore is signed,

or refusal to accept the mailing by the addressee is noted thereon by the postal authorities.

To PWC:
Fayetteville Public Works Commission
Attn: Timothy Bryant, CEO/General Manager
PO Box 1089
Fayetteville, NC 28302

with a copy, which alone shall not constitute notice, to:
Fayetteville Public Works Commission
Attn: Georgette Miller, Chief Legal Officer and General Counsel
PO Box 1089
Fayetteville, NC 28302

To Contractor:
Attn:

23. Termination. PWC may terminate this Agreement immediately if during the progress of the Work or during the warranty period, the Contractor:

- a. Persistently fails to prosecute the Work properly and in accordance with the Contract Documents, including but not limited to include failure to provide sufficient crews, equipment, or resources, or failure to adhere to the schedule;
- b. Demonstrates disregard for the policies, procedures, or requirements of PWC;
- c. Demonstrates complete disregard of the authority of PWC or its designated representatives; or
- d. Violates in any substantial way the provisions and requirements of this Agreement.

Such termination shall be effective upon written notice to Contractor and its surety. PWC may terminate the contract for its convenience by providing Contractor at least seven (7) calendar days prior written notice, in which event Contractor shall be paid for all Work completed, plus other expenses as mutually agreed upon between PWC and Contractor.

24. Compliance. Contractor hereby acknowledges that "E-Verify" is the federal E-Verify program operated by the US Department of Homeland Security and other federal agencies which is used to verify the Work authorization of newly hired employees pursuant to federal law and in accordance with Article 2, Chapter 64 of the North Carolina General Statutes. Contractor further acknowledges that all employers, as defined by Article 2, Chapter 64 of the North Carolina General Statutes, must use E-Verify and after hiring an employee to Work in the United States, shall verify the Work authorization of the employee through E-Verify in accordance with N.C.G.S. §64-26(a). Contractor hereby pledges, attests, and warrants through execution of this Agreement that Contractor complies with the requirements of Article 2, Chapter 64 of the North Carolina General Statutes and further pledges, attests, and warrants that all subcontractors currently employed by or subsequently hired by Contractor shall comply with all E-Verify requirements. Failure to comply with the above requirements shall be considered a breach of this Agreement. Contractor hereby further acknowledges that the execution and delivery of this Agreement constitutes Contractor's certification to PWC and to the North

Carolina State Treasurer that, as of the date of the Effective Date of this Agreement, Contractor is not listed on (a) the Final Divestment List created and maintained by the North Carolina Department of State Treasurer pursuant to the Iran Divestment Act of 2015, Chapter 147, Article 6E of the General Statutes of North Carolina (the "Iran Divestment Act"); or (b) the list of companies that the North Carolina State Treasurer determines to be engaged in a boycott of Israel in accordance with Article 6G of Chapter 147 of the General Statutes of North Carolina. Contractor represents and warrants to Commission that Contractor, and all persons and entities owning (directly or indirectly) an ownership interest in it: (i) are not, and will not become, a person or entity with whom a party is restricted from doing business with under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including, but not limited to, those named on OFAC's Specially Designated and Blocked Persons list) or under any statute, executive order (including, but not limited to, the September 24, 2001, Executive Order 13224 Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action; and (ii) are not knowingly engaged in, and will not knowingly engage in, any dealings or transactions or be otherwise associated with such persons or entities described in clause (i) above. Contractor also shall at all times during the term of this Agreement comply with Executive Order 11246, including but not limited to the Equal Opportunity Clause requirements set forth in 41 C.F.R. § 60-1.4. Contractor shall abide by the requirements of 41 CFR 60-300.5(a) and 60-741.5(a) prohibiting discrimination against qualified individuals on the basis of protected veteran status or disability and requiring affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

25. Environmental Compliance. Except in strict compliance with Environmental Laws (defined below), neither Contractor nor its employees, agents, contractors, subcontractors, licensees or invitees shall use, handle, store, or dispose of (or permit the use, handling, storing, or disposal of) any hazardous or toxic waste or substance in delivering the Services (or transport, transship or permit the transportation or transshipment of the same over or through the real property managed or operated by PWC) which is regulated, controlled, or prohibited by any federal, state, or local laws, ordinances, and/or regulations, including without limitation the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq. ("RCRA"); the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended, 42 U.S.C. § 9601, et seq. ("CERCLA"); the Hazardous Materials Transportation Act, 49 U.S.C. § 801, et seq; the Federal Water Pollution Control Act, 33 U.S.C. § 1321, et. seq; the Toxic Substances Control Act, 15 U.S.C. ("TSCA"); and the Occupational Safety and Health Act, 29 U.S.C. § 651 et seq. (as subsequently amended, "Environmental Laws"). As used herein, hazardous or toxic substances or materials shall include without limitation the following: (1) "hazardous wastes" as defined under RCRA or any other federal, state or local law or regulation, (2) "hazardous substances" as defined under CERCLA or any other federal, state or local law or regulation, (3) gasoline, petroleum, or other hydrocarbon products, by-products, derivatives, or fractions (including spent products), (4) "toxic substances" as defined under TSCA, (5) "regulated medical waste" as defined by 40 C.F.R. § 259.30, (6) any radioactive materials or substances, or (7) asbestos and asbestos containing products. "Hazardous Environmental Condition" means the existence of one or more hazardous or toxic substances or materials on the real property owned or managed by PWC on which the Project is to be constructed. Contractor shall comply with the Emergency Planning and Community Right-to-Know Act of 1986, as amended. Contractor shall immediately report orally to PWC and confirm in writing within three (3) hours any type of chemical spill that occurs in or on any real property managed or operated by PWC.

IN WITNESS WHEREOF, the Parties have executed this Agreement by their duly authorized representatives.

Fayetteville Public Works Commission

CONTRACTOR

**[PER OUR CHARTER (SEE SEC 6A.20),
THE CONSTRUCTION CONTRACT, IF MORE
THAN \$500K, MUST BE BETWEEN THE CITY
(BY AND THROUGH PWC) AND THE CONTRACTOR]**

By: _____
Timothy Bryant, CEO/GM

By: _____

(Printed Name, Title)

Date: _____

Date: _____

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act (N.C. Gen. Stat. § 159-1 et seq.).

By: _____
Rhonda Haskins, Chief Financial Officer

Approved as to form:

Legal Dept.



GENERAL CONDITIONS FOR
FAYETTEVILLE PUBLIC WORKS COMMISSION

General Conditions	5
Article I. Definitions and Terminology.....	5
Section 1.01 Definitions	5
Section 1.02 Terminology	10
Article II. Preliminary Matters.....	11
Section 2.01 Delivery of Bonds and Evidence of Insurance	11
Section 2.02 Copies of Documents.....	11
Section 2.03 Before Starting any Work	12
Section 2.04 Preconstruction Conference; Designation of Authorized Representatives.....	12
Section 2.05 Initial Acceptance of Schedules.....	12
Section 2.06 Electronic Transmittals.....	13
Article III. Contract Documents: Intent, Requirements, Reuse	13
Section 3.01 Intent.....	13
Section 3.02 Reference Standards	13
Section 3.03 Reporting and Resolving Discrepancies	14
Section 3.04 Reuse of Documents.....	15
Article IV. Commencement and Progress of the Work.....	15
Section 4.01 Commencement of Work.....	15
Section 4.02 Reference Points	15
Section 4.03 Progress Schedule.....	16
Section 4.04 Delays in Contractor's Progress	16
Article V. Availability of Lands; Subsurface and Physical Conditions; Hazardous Environmental Conditions	16
Section 5.01 Availability of Lands	16
Section 5.02 Use of Site and Other Areas.....	17
Section 5.03 Differing Subsurface or Physical Conditions or Underground Facilities	17
Section 5.04 Underground Utilities.....	19
Section 5.05 Hazardous Environmental Conditions at Site.....	21
Article VI. Bonds and Insurance.....	21
Section 6.01 Performance and Payment Bonds.....	21
Section 6.02 Insurance	22
Article VII. Contractor's Responsibilities	23
Section 7.01 Supervision and Superintendence	23
Section 7.02 Labor; Working Hours	24
Section 7.03 Services, Materials, and Equipment	25
Section 7.04 "Or Equals"	25
Section 7.05 Concerning Subcontractors, Suppliers, and Others	26
Section 7.06 Patent Fees and Royalties	27

General Conditions (Rev 7/11/2023)	
Section 7.07 Permits	27
Section 7.08 Taxes.....	27
Section 7.09 Laws and Regulations.....	27
Section 7.10 Record Documents	28
Section 7.11 Safety and Protection.....	28
Section 7.12 Emergencies	29
Section 7.13 Shop Drawings, Samples, and Other Submittals	29
Section 7.14 Contractor's General Warranty and Guarantee	31
Section 7.15 Indemnification	32
Section 7.16 Claims Procedure	32
Section 7.17 Delegation of Professional Design Services	33
Article VIII. PWC's Responsibilities	34
Article IX. Amending the Contract Documents; Changes in the Work.....	34
Section 9.01 Amending and Supplementing Contract Documents.....	34
Section 9.02 PWC-Authorized Changes in the Work.....	35
Section 9.03 Unauthorized Changes in the Work.....	35
Section 9.04 Change of Contract Price	35
Section 9.05 Change of Contract Times.....	36
Section 9.06 Change Proposals.....	36
Section 9.07 Execution of Change Orders	37
Section 9.08 Notification to Surety.....	37
Article X. Tests, Inspections, and Approvals; Correction, Removal, or Acceptance of Defective Work	37
Section 10.01 Access to Work	37
Section 10.02 Tests, Inspections, and Approvals.....	37
Section 10.03 Defective Work.....	38
Section 10.04 Acceptance of Defective Work.....	39
Section 10.05 Uncovering Work.....	39
Section 10.06 PWC May Stop the Work.....	40
Section 10.07 PWC May Correct Defective Work.....	40
Article XI. Claims.....	40
Section 11.01 Claims Process	40
Section 11.02 Submittal of Claim	41
Section 11.03 Review and Resolution.....	41
Section 11.04 Dispute Resolution	41
Article XII. Payments to Contractor; Set-Offs; Completion; Correction Period.....	42
Section 12.01 Progress Payments.....	42
Section 12.02 Substantial Completion	44

General Conditions (Rev 7/11/2023)	
Section 12.03 Partial Use or Occupancy.....	45
Section 12.04 Final Inspection	46
Section 12.05 Final Payment	46
Section 12.06 Waiver of Claims	47
Section 12.07 Correction Period	47
Article XIII. Suspension of Work and Termination.....	48
Section 13.01 PWC May Suspend Work.....	48
Section 13.02 PWC May Terminate for Cause	48
Section 13.03 PWC May Terminate For Convenience	49
Section 13.04 Contractor May Stop Work or Terminate	49
Section 13.05 Morality	50
Article XIV. Miscellaneous	50
Section 14.01 Additional General Terms and Conditions	50
Section 14.02 Giving Notice.....	50
Section 14.03 Computation of Times	50
Section 14.04 Cumulative Remedies	50
Section 14.05 Limitation of Damages.....	51
Section 14.06 No Waiver	51
Section 14.07 Survival of Obligations.....	51
Section 14.08 Controlling Law	51
Section 14.09 Headings.....	51

General Conditions

Article I. Definitions and Terminology

Section 1.01 Definitions

Capitalized terms used in the Bid Documents or Contract Documents, including the singular and plural forms, shall have the meaning indicated in the definitions below. In addition to terms specifically defined below, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

- (a) **Addenda**—Written or graphic instruments issued before the opening of Bids which clarify, correct, or change the Bid Documents or other Contract Documents.
- (b) **Agreement**—The written instrument, executed by PWC and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties, designates the specific documents that encompass the Contract Documents, and provides other material provisions that govern the relationship between the parties as it relates to the Project. The Agreement is also referred to, and titled as, the “Construction Agreement.”
- (c) **Application for Payment**—The form that Contractor shall use during the Work in requesting progress or final payments. Any Application for Payment shall be accompanied by such supporting documentation as is required by the Contract Documents.
- (d) **Bid**—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- (e) **Bidder**—An individual or entity that submits a Bid to PWC for the Project.
- (f) **Bid Documents**—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
- (g) **Bidding Requirements**—The Invitation to Bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bidder’s original Bid with any requisite attachments.
- (h) **Business Day**—each calendar day that is not a Saturday, Sunday, or holiday observed by PWC (New Year’s Day, Martin Luther King, Jr. Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veteran’s Day, Thanksgiving Day (and the day after), and Christmas (2 days) for its employees.
- (i) **Change Order**—A document that is signed by Contractor and PWC, which authorizes an addition, deletion, or revision in the Work, an adjustment in the Contract Price or the Contract Times, a change in the scope of the Project, or other revision to the Agreement, issued on or after the Effective Date of the Agreement.
- (j) **Change Proposal**—A written request by Contractor, submitted in compliance with the procedural requirements set forth in the Contract Documents, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by PWC concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Agreement.

- (k) Completion of the Project—Has the meaning as set forth in the Construction Agreement.
- (l) Constituent of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
- (m) Contract Price—The money that PWC has agreed to pay Contractor for Completion of the Project in accordance with the Contract Documents. May also be referred to as “Price” throughout the Contract Documents.
- (n) Contract Times—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; and (b) Completion of the Project.
- (o) Contractor—The individual or entity with which PWC has contracted for performance of the Work and Completion of the Project.
- (p) **Cost of the Work**
 - A. Costs Included: To determine Cost of the Work when Cost of the Work is a component of the Contract Price, except as otherwise may be agreed to in writing by PWC, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the excluded costs specifically itemized below, and shall include only the following items:
 - (i) Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers’ compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
 - (ii) Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers’ field services required in connection therewith. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 - (iii) Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor’s Cost of the Work and

fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this subsection (p).

(iv) Supplemental costs including the following:

- a. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- b. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- c. The cost of utilities, fuel, and sanitary facilities at the Site.
- d. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

B. Costs Excluded: The term Cost of the Work shall not include any of the following items:

(i) Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications agreed upon by Owner and Contractor. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

(ii) Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

(iii) Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

(iv) Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

(v) Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included herein.

(vi) Contractor's fee.

A. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records of the Cost of Work in accordance with generally accepted accounting practices and submit in a form acceptable to PWC an itemized cost breakdown together with supporting data.

(q) Day—a calendar day of 24 hours measured from midnight to the next midnight. Also referred to throughout the Contract Documents as “days” or “calendar days.”

- (r) Design Engineer—The Engineering firm identified on the Contract Drawings and their duly authorized employees and agents, such employees and agents acting within the scope of the particular duties entrusted to them in each case.
- (s) Drawings—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
- (t) Field Order—A written order issued by Project Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
- (u) Final Completion—The day the on which any specified Work is complete in accordance with the Contract Documents.
- (v) Hazardous Environmental Condition—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract Documents, does not establish a Hazardous Environmental Condition.
- (w) Laws and Regulations; Laws or Regulations—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction. Such terms, unless otherwise specified, shall refer to North Carolina laws and regulations.
- (x) Milestone—A principal event in the performance of the Work that the Agreement requires Contractor to achieve by an intermediate completion date or by a time prior to Completion of the Project.
- (y) Non-Compliance Notice—A written notice issued by PWC to Contractor indicating a violation of any term, provision, or requirement of the Contract Documents.
- (z) Notice of Award—The written notice by PWC to a Bidder providing of PWC's acceptance of the Bid upon timely compliance by the Bidder with any conditions precedent provided in the notice.
- (aa) Notice to Proceed—A written notice by PWC to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
- (bb) Progress Schedule—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- (cc) Project—has the meaning ascribed to it in the Agreement and is as more specifically set forth throughout the Contract Documents. "Project" includes the total undertaking to be accomplished for PWC by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

- (dd) Project Engineer—the PWC employee assigned by PWC to coordinate, manage, monitor, and otherwise perform the administration necessary and consistent with PWC’s responsibilities for the Completion of the Project. The Project Engineer has authority to coordinate and work with the Design Engineer regarding any engineering questions, concerns, revisions, alterations, deletions, or additions to the Work, and has authority to approve any changes in the scope of the Work. Project Engineer may assign a “Project Coordinator” who will also be an employee of PWC and have the duties and responsibilities set by the Project Engineer.
- (ee) PWC—Fayetteville Public Works Commission. PWC may also be referred to in the Contract Documents as “Owner.”
- (ff) Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- (gg) Schedule of Submittals—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Project Engineer’s review of the submittals and the performance of related construction activities.
- (hh) Schedule of Values—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
- (ii) Shop Drawings—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Contract Drawings and are not Contract Documents.
- (jj) Site—Lands or areas indicated in the Contract Documents as being furnished by PWC upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by PWC which are designated for the use of Contractor.
- (kk) Specifications—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- (ll) Subcontractor—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
- (mm) Substantial Completion—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Project Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
- (nn) Successful Bidder—The Bidder whose Bid PWC accepts, and to which PWC provides a Notice of Award.
- (oo) Supplementary Conditions—Any part of the Agreement that amends or supplements these General Conditions.

- (pp) Supplier—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
- (qq) Technical Data—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
- (rr) Underground Facilities—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- (ss) Unit Price Work—Work to be paid for on the basis of unit prices.
- (tt) Work—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, materials, equipment, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents and necessary to achieve Completion of the Project.
- (uu) Work Change Directive—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by PWC and recommended by the Project Engineer, ordering an addition, deletion, or revision in the Work.

Section 1.02 Terminology

The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

- (a) Intent of Certain Terms or Adjectives:
 - (i) The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Project Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Project Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the

Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Project Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions the Contract Documents.

- (b) Defective—when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - (i) does not conform to the Contract Documents; or
 - (ii) does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - (iii) has been damaged prior to Project Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by PWC at Substantial Completion in accordance with the Contract Documents).
- (c) Furnish, Install, Perform, Provide
 - (i) The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - (ii) The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - (iii) The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 - (iv) If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

Article II. Preliminary Matters

Section 2.01 Delivery of Bonds and Evidence of Insurance

- (a) Bonds: Contractor shall deliver to PWC such bonds as Contractor is required to furnish simultaneously with delivering the executed Agreement to PWC.
- (b) Contractor’s Insurance: Contractor shall deliver to PWC the certificates and other evidence of the insurance required by the Contract Documents simultaneously with delivering the executed Agreement to PWC.

Section 2.02 Copies of Documents

- (a) PWC will furnish to Contractor up to five (5) printed copies of the Contract Documents upon request by Contractor, and one (1) copy in electronic portable document format

(PDF). Additional printed copies will be furnished upon request at the cost of reproduction.

- (b) PWC will maintain and safeguard at least one original printed record version of the Agreement, including Drawings and Specifications signed and sealed by Design Engineer or other design professionals as applicable. PWC agrees to make such original printed record version of the Agreement reasonably available to Contractor for review during PWC's normal business hours. PWC may delegate the responsibilities under this provision to Design Engineer.

Section 2.03 Before Starting any Work

- (a) Within ten (10) Days after the Contractor receives the Notice of Award from PWC (or as otherwise specifically required by the Contract Documents), Contractor shall submit to PWC for timely review:
 - (i) a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the identifiable aspects of the Work, including any Milestones specified in the Contract Documents;
 - (ii) a preliminary Schedule of Submittals; and
 - (iii) Any Shop Drawings, Samples, and other submittals required by the Contract Documents before the Preconstruction Conference.

Section 2.04 Preconstruction Conference; Designation of Authorized Representatives

- (a) Before any Work at the Site is started, a preconstruction conference attended by PWC, Project Engineer, Contractor, Design Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss general Project issues including, but not limited, the following:
 - (i) The schedules and submittals referred to in Section 2.03;
 - (ii) Contractor's designated authorized representative as described in Section 2.04(b);
 - (iii) Safety;
 - (iv) Procedures for handling Shop Drawings, Samples, and other submittals;
 - (v) Processing Applications for Payment, electronic or digital transmittals;
- (b) At the preconstruction conference Contractor shall designate, in writing, a specific individual to act as its authorized representative with respect to its services and responsibilities under the Contract Documents. Such individual shall have the authority to transmit and receive information, render decisions relative to the requirements of the Contract Documents, and otherwise act on behalf of the Contractor.

Section 2.05 Initial Acceptance of Schedules

- (a) At least twenty (20) Days before submission of the first Application for Payment a conference, attended by Contractor, PWC, and others as appropriate, will be held to review for acceptability to Project Engineer as provided below the schedules submitted in accordance with Paragraph 2.03(a). PWC shall have ten (10) Days to review the submission and provide feedback to Contractor. Contractor shall then have ten (10) days to make any corrections and adjustments as indicated by PWC and to complete and resubmit the schedules as necessary. No progress payment shall be made to Contractor until acceptable schedules are submitted to and approved by Project Engineer.

General Conditions (Rev 7/11/2023)

- (b) The Progress Schedule will be acceptable to Project Engineer if it provides an orderly progression of the Work to achieve Completion of the Project within the Contract Times. Such acceptance will not impose on Project Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
- (c) Contractor's Schedule of Submittals will be acceptable to Project Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

Section 2.06 Electronic Transmittals

- (a) Except as otherwise stated elsewhere in the Contract Documents, PWC and Contractor and their authorized agents may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through electronic mail at the address(es) designated by each Party.
- (b) When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

Article III. Contract Documents: Intent, Requirements, Reuse

Section 3.01 Intent

- (a) The Contract Documents are complementary; what is required by one is as binding as if required by all.
- (b) It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- (c) Project Engineer, Design Engineer, or both, will issue clarifications and interpretations of the Contract Documents as provided herein.
- (d) To the extent necessary that Work, construction, or conditions not covered by these General Conditions is required for Contractor to achieve Completion of the Project, "Special Conditions" for such Work will be provided to Contractor and shall be part of the Contract Documents.
- (e) In case of any inconsistency, conflict, or ambiguity among the Contract Documents, the documents shall govern in the following order: (1) Change Orders; (2) Addenda; (3) the fully executed Agreement; (4) Special Conditions; (5) any Drawings and Technical Specifications; and (6) General Conditions.

Section 3.02 Reference Standards

- (a) Standards Specifications, Codes, Laws and Regulations

- (i) Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or North Carolina laws and regulations in effect as of the Effective Date of the Agreement, except as may be otherwise specifically stated in the Contract Documents.
- (ii) No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of PWC or Contractor, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to PWC or any of its officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents.

Section 3.03 Reporting and Resolving Discrepancies

(a) Contractor's Verification of Figures and Measurements

- (i) Before undertaking any portion of the Work, Contractor shall review all of the Contract Documents to and check and verify all figures and dimensions for the Project. Contractor shall promptly report in writing to Project Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Project Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to these General Conditions.
- (ii) If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Project Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as defined hereinafter) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Project Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to these General Conditions.

(b) Resolving Discrepancies:

- (i) Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for PWC shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - 1) the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - 2) the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

Section 3.04 Reuse of Documents

- (a) Contractor and its Subcontractors and Suppliers shall not have or acquire any title to or ownership rights in any of the:
 - (i) Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Design Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of PWC and Design Engineer and specific written verification or adaptation by Design Engineer, where applicable; or
 - (ii) Contract Documents and shall not reuse any such Contract Documents for any purpose without PWC's express written consent.
- (b) The prohibitions of this provision shall survive final payment or termination of the Agreement. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

Article IV. Commencement and Progress of the Work

Section 4.01 Commencement of Work

- (a) The Contract Times will commence to run on the day indicated in the Notice to Proceed issued by PWC to Contractor. A Notice to Proceed may be given at any time after the Effective Date of the Contract.
- (b) Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date. Contractor's failure to commence the Work within fifteen (15) Days of the date stated in the Notice to Proceed shall be deemed a material breach of the Agreement unless PWC otherwise determines in its sole discretion and agrees in writing to a delay of the Contract Times based on the applicable circumstances.

Section 4.02 Reference Points

- (a) Construction staking will be performed by Design Engineer, who will also prepare and furnish construction cut sheets, signed and sealed by a North Carolina professional land surveyor, to PWC and Contractor. Contractor shall not install any utilities without a sheet. All requests for staking shall be made not less than 96 hours in advance.
- (b) Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and staking, and shall make no changes or relocations without the prior written approval of Project Engineer. Contractor shall report to Project Engineer whenever any reference point staking is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or staking by professionally qualified personnel.

Section 4.03 Progress Schedule

- (a) Contractor shall adhere to the Progress Schedule established in accordance with Section 2.03 as it may be adjusted from time-to-time as provided below. Contractor shall submit to Project Engineer for acceptance any proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article IX.
- (b) Contractor shall carry on the Work and adhere to the Progress Schedule during any disputes or disagreements with PWC. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by these General Conditions or as PWC and Contractor may otherwise agree in writing.

Section 4.04 Delays in Contractor's Progress

- (a) If PWC, Project Engineer, anyone for whom PWC is responsible, or a Force Majeure Event delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- (b) Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- (c) Contractor must submit any Change Proposal, consistent with the procedure set forth in Article IX, seeking an adjustment in Contract Price or Contract Times under this provision within ten (10) calendar days of the commencement of the event that causes the delay, disruption, or interference with the Work and Contract Times.

Article V. Availability of Lands; Subsurface and Physical Conditions; Hazardous Environmental Conditions

Section 5.01 Availability of Lands

- (a) PWC will be responsible for obtaining any required easements and encroachments, and otherwise furnishing the Site, necessary to complete the Work, except as provided elsewhere in the Contract Documents.
- (b) Upon reasonable written request, PWC shall furnish to Contractor a current statement of record legal title and legal description of the lands upon which the Work is to be completed and PWC's interest therein.
- (c) Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment necessary to complete the Work. Any and all agreements between the Contractor and any individual property owner(s) shall not obligate PWC, PWC's employees, Project Engineer, or Design

General Conditions (Rev 7/11/2023)

Engineer in any manner, and Contractor shall, before performing any work on any such property, obtain a signed and notarized release of liability of PWC and Design Engineer that is suitable to PWC as confirmed in writing.

- (d) Contractor and any of its Subcontractors shall exercise care and caution to avoid damage to any private property. Should any such damage to private property occur, it is Contractor's responsibility to notify the Project Engineer promptly in writing that such damage occurred, the extent of the damage, and Contractor's written plan to remedy the damage. If Contractor fails to timely correct damage to private property, PWC reserves the right to withhold progress payments until damage is corrected and/or to correct damage and back-charge Contractor for costs incurred. At the Completion of the Project, Contractor shall obtain a signed release from all owners of private property to which damage occurred that releases PWC and Design Engineer and acknowledges a settlement for the damage or that such damage was adequately remedied.

Section 5.02 Use of Site and Other Areas

- (a) Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site and other adjacent areas permitted by Laws and Regulations and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
- (b) Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris during the progress of the Work. Removal and disposal of such debris shall conform to applicable Laws and Regulations.
- (c) Prior to Completion of the Project, Contractor shall clean the Site and the Work and make it ready for utilization by PWC. At the completion of all of the Work, Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- (d) Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

Section 5.03 Differing Subsurface or Physical Conditions or Underground Facilities

- (a) If Contractor believes that any subsurface or physical condition or Underground Facilities that is uncovered or revealed at the Site either:
 - (i) is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely is materially inaccurate;
 - (ii) is of such a nature as to require a change in the Contract Documents;
 - (iii) differs materially from that shown or indicated in the Contract Documents; or

- (iv) is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or Underground Facilities or performing any Work in connection therewith, notify PWC and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement approved by PWC permitting Contractor to do so.

- (b) After receipt of Contractor's written notice, Project Engineer will review the subsurface or physical condition or Underground Facilities in question; determine the necessity of PWC obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any of the differing site condition categories in this Section 5.03; and obtain any pertinent cost or schedule information from Contractor.
- (c) Project Engineer will issue a written statement to Contractor regarding the subsurface or physical condition or Underground Facilities in question, which addresses the resumption of Work in connection with such condition and indicates whether any change in the Contract Documents will be made.

(d) Possible Price and Times Adjustments:

- (i) Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition or Underground Facilities, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - 1) such condition must fall within at least one of the categories in this Section 5.03; and,
 - 2) Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- (ii) Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition or Underground Facilities if:
 - 1) Contractor knew of the existence of such condition at the time Contractor proffered its Bid to PWC or executed the applicable Agreement for the Project; or
 - 2) the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's Bid; or
 - 3) Contractor failed to give the written notice as required.
- (iii) If PWC and Contractor agree regarding Contractor's entitlement to, and the amount or extent of, any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- (iv) Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 calendar days after Project Engineer's written statement to Contractor regarding the

subsurface or physical condition or Underground Facilities in question.

Section 5.04 Underground Utilities

- (a) Contractor shall ascertain the location and type of all underground utility lines or structures that may be located within the limits of the Site or any area where Work is to be performed.
 - (i) The exact location of underground utilities or structures may vary from prior plans, permits, maps, or other documentation, and others may not be designated. The Contractor is fully responsible for verification of the exact location of all underground utility lines or structures within the limits of the Site or the area where the work is to be performed, whether known or unknown by PWC, and for providing necessary protection and/or repair if damage.
 - (ii) Should uncharted or incorrectly charted piping or other utilities be encountered during excavations, the Contractor shall immediately halt any Work, notify PWC, and await direction from PWC before proceeding with any Work. The Contractor shall fully cooperate with PWC and any other utility company in keeping respective services and facilities in operation.
- (b) PWC has used reasonable care to locate and depict existing underground installation on the construction drawings, but the accuracy cannot be guaranteed, and some items may not be shown which exist. Actual horizontal and vertical locations have not been verified. As part of the Work, the Contractor is required to dig up each utility which may conflict with construction in advance to verify locations. The utilities shall be "dug up" a minimum of fourteen (14) Days in advance of actual installation of new utilities to allow PWC an opportunity to adjust grades and alignments, to avoid a conflict, and to address any other issues.
- (c) The Contractor shall adhere to the provisions of the North Carolina Underground Utility Safety and Damage Prevention Act. The Contractor shall make a documented request to the North Carolina One Call Center, and/or individual utility owners, in order to locate any facilities within the Site limits or any area where Work is to be performed at least forty-eight (48) hours in advance of the day the Work is scheduled to begin. The Contractor shall include the cost of any coordination and cooperation for utilities in its Bid.
 - (i) Location assistance requested from PWC by Contractor should include the actual horizontal location, type number, size, and depth of all lines. All costs associated with locating and marking existing utilities or the utilities representatives shall be the responsibility of the Contractor.
 - (ii) The Owner, Project Engineer, Design Engineer, and/or Consultants shall not be liable to the Contractor for any claims, costs, losses, or damages incurred or sustained on or in connection with locating existing underground installations.
- (d) If the Contractor fails to schedule locates or perform advance physical locations in advance of the construction and a conflict arises, the Contractor will be required to make corrective measures as instructed by the Project Engineer at the Contractor's expense. The Contractor's failure to advance plan (minimum fourteen (14) days) by physically

General Conditions (Rev 7/11/2023)

uncovering existing utilities in advance of construction shall not be cause for claim of lost time or for additional compensation. No additional payment will be made for re-mobilization required by the utility locator.

- (i) The Contractor shall inform all equipment operators, either those employed by him or those employed by his subcontractors, of information obtained from the utility owners prior to initiation of any aspect of any Work.
- (e) PWC and Design Engineer shall not be responsible for the accuracy or completeness of any information or data provided to the Contractor with respect to underground facilities.
- (f) The entire cost of all of the following will be included in the Contract Price, and Contractor shall bear full responsibilities for all such costs, including but not limited to:
 - (i) Reviewing and checking all such information and data;
 - (ii) Locating all underground facilities shown or indicated in the Contract Documents;
 - (iii) Coordination of the Work with the owners of such underground facilities, including PWC, during any portion of the Work; and
 - (iv) The safety and protection of all such underground facilities and repairing any damage thereto resulting from the Work.
- (g) Contractor shall be responsible for the discovery of existing underground installations, in advance of any excavating or trenching as required in the Contract Documents.
- (h) If an underground facility is discovered at or contiguous to the Site that was not shown or indicated in the Contract Documents or of which Contractor was not aware prior to starting that portion of any Work, Contractor shall, immediately after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency), identify the owner of such underground facility and give written notice to PWC. Upon receipt of written notice, PWC will review the pertinent condition, determine the necessity of obtaining additional information, and advise Contractor in writing. During such time, Contractor shall be responsible for the safety and protection of such underground facility. If PWC concludes that a change in the Contract Documents is required, a Change Order will be issued.
- (i) The Contract Price and/or the Contract Time, may be adjusted if PWC determines, in its discretion, that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work subject to the following:
 - 1) Facility was not shown or indicated in the Contract Documents, and
 - 2) The Contractor did not know of or could not anticipate the facility.

Section 5.05 Hazardous Environmental Conditions at Site

- (a) Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work or Hazardous Environmental Condition was caused by Contractor.
- (b) Contractor shall be responsible for controlling, containing, and removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- (c) If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency); and (3) immediately notify Project Engineer (and promptly thereafter confirm such notice in writing). Project Engineer will evaluate such condition or take corrective action, if any. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then PWC may have the Hazardous Environmental Condition removed and remediated and impose a set-off against payments to Contractor to account for the reasonable associated costs.
- (d) Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after PWC has delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- (e) If PWC and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within thirty (30) calendar days of PWC's written notice regarding the resumption of Work, Contractor may submit a Change Proposal or PWC may impose a set-off.
- (f) If after receipt of such written notice Contractor does not agree to resume such Work based on reasonable evidence it is unsafe or does not agree to resume such Work under such special conditions, then PWC may order the portion of the Work that is in the area affected by such condition to be deleted from the Work.

Article VI. Bonds and Insurance

Section 6.01 Performance and Payment Bonds

- (a) Contractor shall obtain and furnish to PWC a performance bond in the amount of one hundred percent (100%) of the Contract Price, conditioned upon the faithful performance of the Project and all Work in accordance with the Contract Documents, which bond shall be

solely for the protection of PWC.

- (b) Contractor shall obtain and furnish to PWC a payment bond in the amount of one hundred percent (100%) of the Contract Price, conditioned upon the prompt payment for all labor or materials for which the Contractor or one or more of its subcontractors is liable, which payment bond shall be solely for the protection of the persons furnishing materials or performing labor for which the Contractor is liable.
- (c) The performance bond and the payment bond shall be executed by one or more surety companies legally authorized to do business in the State of North Carolina, shall become effective upon the awarding of the construction contract by PWC to Contractor, and shall at all times comply with the requirements set forth in Article 3 of North Carolina General Statutes Chapter 44A.
- (d) In the event PWC deems the surety or sureties upon any bond necessary for the Agreement and the completion of the Project, or if for any reason, such bond ceases to be adequate to cover the performance and/or payment of the Work, Contractor shall, at its expense, and within ten (10) days after the receipt of notice from PWC, furnish such additional bond(s) in such form and amount, and with such surety or sureties, as shall be satisfactory to PWC. In such event no further payment to Contractor shall be deemed to be due under this Agreement until new or additional security for the performance and payment of the Project shall be furnished in manner and form satisfactory to PWC.
- (e) By executing the Agreement, Contractor understands and acknowledges that PWC, as a public authority, and the City, as a municipal corporation, are not subject to the provisions of Articles 1 and 2 of Chapter 44A of the General Statutes, in accordance with G.S. 44A-34 and applicable law.

Section 6.02 Insurance

- (a) Contractor shall maintain during the life of the Agreement and during the completion of any Work the following insurance coverages, which insurance shall be placed with insurance companies authorized to do business in the State of North Carolina and rate A minus VII or better by the current edition of Best's Key Rating Guide or otherwise approved in writing by PWC:
 - (i) Commercial general liability insurance with limits of \$1,000,000 per occurrence, \$2,000,000 aggregate other than products/completed operations; \$2,000,000 aggregate for products/completed. Commercial general liability coverage shall be written on an "occurrence" basis.
 - (ii) Automobile liability insurance in an amount not less than \$1,000,000 combined single limit per accident for bodily injury and property damage from owned, non-owned, and hired automobiles.
 - (iii) Workers' compensation insurance as required by the Laws and Regulations. In the event any employee(s), contractor(s), or subcontractor(s) engaged to perform any Work under the Agreement is not protected under the applicable workers' compensation laws, the Contractor shall provide adequate coverage for the protection of such employee(s), contractor(s), or subcontractor(s) not otherwise protected.

- (iv) In the event the Project concerns building construction or repair work, Contractor shall purchase and maintain "Builder's Risk" insurance. This insurance shall include the interests of the PWC, Contractor, and any Subcontractor(s) and shall be written on a one hundred percent (100%) completed value basis (full value as of the date that all construction is finished and includes the Contractor's Contract Price), and to remain in force until Completion of the Project.
- (v) Regardless of the nature of the work to be performed, coverage must also be provided for the theft or damage of building materials and supplies, which are not permanently attached or stored on Site for any period of time. This coverage shall be an "Installation Floater." If no building construction or repair is involved for the Project, the amount of the coverage shall equal the value of the materials stored on site.
- (b) Prior to initiating any Work on the Project, Contractor shall deliver certificates of insurance confirming each such coverage set forth above, and Contractor shall direct its insurers to provide annually to PWC certificates confirming each such coverage during the coverage period.
- (c) PWC shall be named as an additional insured in the comprehensive automobile and commercial liability insurance policies.
- (d) Contractor shall not reduce or allow the required insurance coverages to lapse without PWC's prior written approval. All policies for insurance must be endorsed to contain a provision giving PWC a thirty (30) calendar day prior written notice by certified mail of any cancellation of that policy or material reduction in coverage. Should a notice of cancellation be issued for non-payment of premiums or any part thereof, or should Contractor fail to provide and maintain certificates as set forth herein, PWC shall have the right, but shall not have the obligation, to pay such premium to the insurance company or to obtain such coverage and to deduct such payment from any sums that may be due or become due to Contractor, or to seek reimbursement for said payments from Contractor. Any such sums paid by PWC shall be due and payable immediately by Contractor upon notice from PWC.
- (e) The insurance coverage requirements shall not be construed as a limitation on Contractor's responsibilities and liabilities pursuant to the terms and conditions of this Agreement. Contractor's obligation to maintain insurance for three (3) years after Completion of the Project shall survive the termination of this Agreement.
- (f) If Contractor fails to obtain and maintain any required insurance, PWC may exclude Contractor from the Site, impose an appropriate set-off against payment, and exercise PWC's termination rights pursuant to the Contract Documents.
- (g) PWC does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.

Article VII. Contractor's Responsibilities

Section 7.01 Supervision and Superintendence

- (a) Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention and applying such skills and expertise as may be necessary to

perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction subject to the terms, provisions, and specifications set forth in the Contract Documents.

- (b) At all times during the progress of the Work, Contractor shall assign a competent superintendent, satisfactory to Project Engineer, to supervise the Work and to respond to Project Engineer concerning PWC's interests in the Work.
- (c) Contractor's superintendent shall have full authority to act on behalf of Contractor and all communications, instructions, directions, and notices given to the superintendent by the Project Engineer shall be binding to the Contractor.
- (d) Contractor's superintendent shall be responsible for coordination of the Work with other contractors or subcontractors. The superintendent shall not be replaced without written notice to PWC except under extraordinary circumstances.
- (e) Subcontractors
 - (i) Contractor shall submit the names and references all Subcontractors to the Project Engineer for approval before commencing any Work.
 - 1) In the event Contractor seeks to substitute any Subcontractor that was identified in Contractor's Bid, Contractor shall promptly provide PWC with: (1) the Subcontractor it seeks to substitute; (2) the identity of the Subcontractor to be substituted; and (3) the reason for the requested substitution.
 - 2) PWC will review the requested substitution within five (5) Business Days and provide written approval or denial of the substitution, with such approval not to be unreasonably withheld.
 - (ii) Contractor's superintendent shall be available to be present at the Site at any time that any Subcontractor(s) is performing any of the Work. Construction activity shall be stopped if the Contractor's superintendent is not available to be at the Site.

Section 7.02 Labor; Working Hours

- (a) Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site. Contractor shall remove from the Project any person who appears incompetent, disorderly, or otherwise unsatisfactory. Contractor shall also remove any person who appears in PWC's sole discretion to be incompetent, disorderly, or otherwise unsatisfactory
- (b) Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed on Business Days. Contractor will not perform Work on non-Business Days. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with PWC's written consent, which will not be unreasonably withheld. In such circumstances, Contractor shall submit a written request to PWC at least two (2) Business Days prior to any Work that it requests to complete on a

non-Business Day and PWC will, in its sole discretion, approve or deny such request. If such work outside of a Business Day is approved, PWC will set forth the specific parameters that Contractor must follow, including time of work, personnel, and any other issues.⁸

Section 7.03 Services, Materials, and Equipment

- (a) Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and Completion of the Project, whether or not such items are specifically called for in the Contract Documents.
- (b) All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise specified in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of PWC. If required by PWC or its designee, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- (c) All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be specified in the Contract Documents.

Section 7.04 "Or Equals"

- (a) Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Project Engineer authorize the use of other items of material or equipment under the circumstances described below.
 - (i) If Project Engineer determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Project Engineer shall deem it an "or equal" item and confirm such in writing to Contractor. A proposed item of material or equipment will be considered functionally equal to an item so named if:
 - 1) in the exercise of reasonable judgment Project Engineer determines that:
 - a) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - b) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - c) it has a proven record of performance and availability of responsive service; and
 - d) it is not objectionable to PWC.
 - 2) Contractor certifies that, if approved and incorporated into the Work:
 - a) there will be no increase in the Contract Price or Contract Times; and

General Conditions (Rev 7/11/2023)

- b) it will conform substantially to the detailed requirements of the item specified in the Contract Documents.
- (b) Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- (c) Project Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Project Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Project Engineer will be the sole judge of acceptability. Contractor shall not order, furnish, install, or utilize any "or-equal" it until Project Engineer has reviewed the request, determined that the proposed item is an "or-equal," and provided written confirmation to Contractor.
- (d) Project Engineer's denial of an "or-equal" request shall be final and binding and may not be reversed through an appeal under any provision of the Contract Documents.

Section 7.05 Concerning Subcontractors, Suppliers, and Others

- (a) Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to PWC.
- (b) Contractor shall not subcontract more than forty-nine percent (49%) of the final Contract Price.
- (c) Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract Documents.
- (d) After the submittal of Contractor's Bid or final negotiation of the terms of the Agreement, PWC may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work.
- (e) Prior to entry into any binding subcontract or purchase order, Contractor shall submit to PWC the identity of the proposed Subcontractor or Supplier (unless PWC has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to PWC unless PWC raises a substantive, reasonable objection within five (5) Business Days.
- (f) No acceptance by PWC of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of PWC to the completion of the Work in accordance with the Contract Documents.
- (g) Contractor shall be fully responsible to PWC for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- (h) Contractor shall be solely responsible for scheduling and coordinating the Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- (i) Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with PWC, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.

- (j) All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of PWC.
- (k) PWC may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- (l) Nothing in the Contract Documents:
 - (i) shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between PWC or Design Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - (ii) shall create any obligation on the part of PWC or Design Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

Section 7.06 Patent Fees and Royalties

- (a) Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device that is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of PWC, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by PWC in the Contract Documents.

Section 7.07 Permits

- (a) Unless otherwise specified in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses necessary to achieve Completion of the Project. Contractor shall timely seek assistance from PWC if necessary to obtain any permits or licenses; provided that, the Contract Time shall not be extended if PWC determines, in its discretion, that Contractor delayed or otherwise did not act expeditiously in requesting such assistance. PWC shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for Completion of the Project that are applicable at the time of the submission of Contractor's Bid.

Section 7.08 Taxes

- (a) Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the applicable Laws and Regulations for the Project and which are applicable during the performance of the Work.

Section 7.09 Laws and Regulations

- (a) Contractor shall give all notices required by, and shall comply with, all Laws and Regulations applicable to the Project. Except as otherwise expressly required, PWC shall

not be responsible for monitoring Contractor's compliance with any Laws or Regulations.

- (b) Contractor shall bear all resulting costs and losses for any of its actions or inactions that are contrary to Laws or Regulations.
- (c) PWC or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under the Agreement) concerning any Laws or Regulations having an effect on the Contract Price or Contract Times, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If PWC and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 calendar days of such notice Contractor may submit a Change Proposal.

Section 7.10 Record Documents

- (a) Contractor shall maintain in good order one (1) printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. These record documents, together with all approved Samples, will be available to Project Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to PWC.

Section 7.11 Safety and Protection

- (a) Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - (i) all persons on the Site or who may be affected by the Work;
 - (ii) all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - (iii) other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- (b) Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss, and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify PWC, the owners of adjacent property or Underground Facilities, and other contractors and owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- (c) Contractor shall comply with the requirement of any of PWC's applicable health programs, which may be revised from time to time based on specific circumstances or applicable guidance from the Center for Disease Control or other applicable entity. Such health programs will be identified in the Special Conditions if applicable to the Project.

- (d) Contractor shall comply with the requirements of PWC's applicable safety programs. The Special Conditions identify any of PWC's safety programs that are applicable to the Project.
- (e) Contractor shall remedy, at its expense, all damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- (f) Contractor's duties and responsibilities for safety and protection shall continue until such time as Completion of the Project is achieved.
- (g) Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.
- (h) Contractor shall designate in writing to PWC a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

Section 7.12 Emergencies

- (a) In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to, and shall, act to prevent threatened damage, injury, or loss. Contractor shall give PWC prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused or are required as a result of any emergency. If PWC determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

Section 7.13 Shop Drawings, Samples, and Other Submittals

- (a) Contractor shall timely submit Shop Drawings and Samples required by the Contract Documents to Project Engineer for review and approval in accordance with applicable specifications.
- (b) Before submitting a Shop Drawing or Sample, Contractor shall have
 - (i) reviewed the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - (ii) verified all measurements, quantities, dimensions, performance and design criteria, installation requirements, materials, catalog numbers, and similar information;
 - (iii) verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - (iv) verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- (c) With each submittal, Contractor shall give Project Engineer specific written notice of any

variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to PWC for review and approval of each such variation.

- (d) Where a Shop Drawing or Sample is required by the Contract Documents, any related Work performed prior to Project Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- (e) Project Engineer will provide timely review of any required Shop Drawings and Samples. Such review, and subsequent determination of approval, will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- (f) Project Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
- (g) Project Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not change the Contract Times or Contract Price, unless such changes are included in a Change Order.
- (h) Project Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall not result in such item becoming a Contract Document.
- (i) Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples.
- (j) Resubmittal Procedures:
 - (i) Contractor shall make corrections required by Project Engineer and shall return the required number of corrected copies of Shop Drawings and submit new Samples as required for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by PWC or Project Engineer on previous submittals.
 - (ii) Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three (3) submittals. If PWC has engaged a Design Engineer for the Project, Design Engineer will record Design Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Design Engineer's charges to PWC for such time. PWC may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
 - (iii) If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Design Engineer's charges to PWC for its review time, and PWC may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

Section 7.14 Contractor's General Warranty and Guarantee

- (a) In order to induce PWC to enter into an Agreement with Contractor for the Project, Contractor warrants and guarantees to PWC that:
- (i) Contractor is duly licensed in the State of North Carolina to complete all Work necessary for the Project, is duly organized, validly existing and in good standing and has all requisite powers, rights, and authority to execute, enter into, and perform the Agreement in accordance with the terms and conditions of the Agreement, and the Agreement constitutes a legal, valid, and binding obligation of Contractor enforceable against it in accordance with its terms.
 - (ii) Contractor has read the Contract Documents, and acknowledges and understands all data, materials, specifications, and requirements identified in the Contract Documents.
 - (iii) Contractor has visited the site for the Project, conducted a thorough, visual examination of the site and adjacent areas, and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, and performance in completing the Project.
 - (iv) Contractor is familiar with and is satisfied as to all laws and regulations that may affect cost, progress, and performance to complete the Project.
 - (v) Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the site and all drawings of physical conditions relating to existing surface or subsurface structures at the site that have been identified in the Detail Specifications and any accompanying reports and drawings, and (2) reports and drawings relating to any Hazardous Environmental Condition at or adjacent to the site that have been identified in the Contract Documents and any accompanying reports and drawings.
 - (vi) Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, if any, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
 - (vii) Based on the information and observations referred to in subsection "(v)" of this Section, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price and in accordance with the other terms and conditions of the Contract Documents.
 - (viii) Contractor is aware of the general nature of work to be performed by PWC and others at the Site that relates to the Work as indicated in the Contract Documents.
 - (ix) Contractor has given PWC written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by PWC is acceptable to Contractor.
 - (x) The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
 - (xi) Contractor's entry into this Agreement constitutes an incontrovertible representation by Contractor that, without exception, all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.
 - (xii) Contractor has no business or personal relationship with any PWC Commissioner, officer, director, manager, or supervisor and Contractor covenants to disclose immediately to PWC any such relationship that develops during the performance of Work on the Project.

- (b) Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 - (i) observations by Project Engineer;
 - (ii) recommendation by Project Engineer or payment by PWC of any progress or final payment;
 - (iii) the issuance of a certificate of Substantial Completion by Project Engineer or any payment related thereto by PWC;
 - (iv) use or occupancy of the Work or any part thereof by PWC;
 - (v) any review and approval of a Shop Drawing or Sample submittal;
 - (vi) the issuance of a notice of acceptability by Project Engineer;
 - (vii) any inspection, test, or approval by others; or
 - (viii) any correction of defective Work by PWC.
- (c) If the Contract Documents requires the Contractor to accept the assignment of a contract entered into by PWC, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to PWC for the Work described in the assigned contract.

Section 7.15 Indemnification

- (a) Contractor shall indemnify, defend, and hold harmless PWC and its Commissioners, officers, employees, agents, and representatives and the City and its elected officials, managers, employees, agents, and representatives and Designer (collectively "Indemnitees") from and against all claims, actions, liabilities, damages, losses, costs, and expenses (including, without limitation, injury to or death of any persons and damage to property, economic and consequential damages and attorneys' fees) asserted by one or more third parties against one or more of the Indemnitees if the Fault of one or more Responsible Persons is a proximate cause of the loss, damage, or expense indemnified.
- (b) Contractor's obligation to indemnify, defend, and hold harmless the Indemnitees shall survive the termination of the Agreement.
- (c) In any and all claims against the Indemnitees of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, Contractor's indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

Section 7.16 Claims Procedure

- (a) PWC shall notify the Contractor of all potential claims related to the Work within seven (7) calendar days of receiving notification or having knowledge of such potential claim. Should the Contractor receive a potential claim related to the Work, the Contractor shall notify PWC within seven (7) calendar days of receiving notification. The Contractor shall provide the claimant and PWC with a written response acknowledging receipt of the claim within

seven (7) calendar days.

- (b) If the Contractor meets with the Claimant about the claim, a representative designated by PWC shall be present at all times. PWC shall maintain a record of any claim received, and the steps taken to resolve. PWC shall also concurrently investigate each case. The Contractor agrees to furnish PWC any information regarding the claim, the actions which led to the claim and/or the investigation of the claim. Contractor shall provide their proposed response to PWC within thirty (30) calendar days of receiving the claim. Upon receipt of the response PWC and the Contractor will discuss and reach a mutual agreement of the response necessary to send to the Claimant within fifteen (15) calendar days. Once the agreement is made the Contractor shall make a formal written resolution to the claimant.
- (c) Failure to act in good faith or respond to a claim in the timelines established by the Contract Documents will constitute a lack of response by the Contractor, therefore validating the claim. PWC will deduct the total amount of the claim from the monthly pay application. Failure to comply with the above requirements for resolving claims may, at the sole discretion of PWC, result in breach of contract.
- (d) The Contractor is aware of these claims procedures and understands that it is the PWC's practice to pursue reimbursement/subrogation for any and all claims related expenses, which are incurred as a result of the Contractor's performance under this Contract Documents and allowed within the applicable statute of limitations.

Section 7.17 Delegation of Professional Design Services

- (a) Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- (b) If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, PWC will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to PWC.
- (c) PWC shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided PWC has specified to Contractor all performance and design criteria that such services must satisfy.
- (d) Pursuant to this Section, PWC's, or its designee's, review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. PWC specifically retains final approval of such

submittals.

- (e) Contractor shall not be responsible for the adequacy of the performance or design criteria specified by PWC.

Article VIII. PWC's Responsibilities

- (a) In awarding the bid to Contractor and executing the applicable Agreement, PWC acknowledges the following responsibilities:
 - (i) Except as otherwise provided in these General Conditions, PWC shall issue all communications directly to Contractor or its designee.
 - (ii) PWC may at its discretion replace Design Engineer and Project Engineer. The replacement Design Engineer or Project Engineer's status under the Contract Documents shall be that of the former Design Engineer or Project Engineer.
 - (iii) PWC shall promptly furnish the data required of PWC under the Contract Documents.
 - (iv) PWC shall make payments to Contractor when they are due as provided in the Contract Documents.
 - (v) PWC shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. PWC will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
 - (vi) Upon request of Contractor, PWC shall furnish to Contractor reasonable evidence that financial arrangements have been made to satisfy PWC's obligations under the Contract Documents (including obligations under proposed changes in the Work).
 - (vii) While at the Site, PWC's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which PWC has been informed.
 - (viii) PWC shall furnish copies of any applicable PWC safety program(s) to Contractor, which Contractor shall review and implement.

Article IX. Amending the Contract Documents; Changes in the Work

Section 9.01 Amending and Supplementing Contract Documents

- (a) The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - (i) Change Orders: If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - (ii) Work Change Directives: A Work Change Directive will not change the Contract Price or the Contract Times, but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are

unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 9.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. PWC must submit any dispute or request seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

- (iii) Field Orders: Project Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on PWC and on Contractor, which shall perform promptly the Work involved. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

Section 9.02 PWC-Authorized Changes in the Work

- (a) Without invalidating the Agreement and without notice to any surety, PWC may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Design Engineer's recommendation when applicable and to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work as revised. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

Section 9.03 Unauthorized Changes in the Work

- (a) Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented.

Section 9.04 Change of Contract Price

- (a) The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of these General Conditions.
- (b) An adjustment in the Contract Price will be determined as follows:
 - (i) where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved; or
 - (ii) where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit as agreed to in writing by the Parties); or
 - (iii) where the Work involved is not covered by unit prices contained in the Contract Documents and the Parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work plus a reasonable Contractor's fee for overhead and profit.

- (c) Contractor's Fee: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
 - (i) a mutually acceptable fixed fee; or
 - (ii) if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - 1) for unit prices, the Contractor's fee shall be fifteen percent (15%);
 - 2) for all other costs incurred, the Contractor's fee shall be five percent (5%);
 - 3) the amount of credit to be allowed by Contractor to PWC for any change that results in a net decrease in the Contract Price will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - 4) when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change.

Section 9.05 Change of Contract Times

- (a) The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 9.06.
- (b) An adjustment of the Contract Times shall be subject to the limitations set forth in these Contract Document as it concerns delays in Contractor's progress.

Section 9.06 Change Proposals

- (a) Contractor shall submit a Change Proposal to PWC to request an adjustment in the Contract Times and/or Contract Price. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
 - (i) Procedures: Contractor shall submit each Change Proposal to PWC promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to PWC within 15 calendar days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.
 - (ii) PWC Action: PWC will review each Change Proposal and, within 30 calendar days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing to Contractor. If PWC does not take action on the Change Proposal within 30 calendar days, then the Change Proposal is deemed denied, thereby commencing the time for appeal under these General Conditions.
 - (iii) Binding Decision: PWC's decision will be final and binding unless Contractor appeals the decision.

Section 9.07 Execution of Change Orders

- (a) PWC and Contractor shall execute appropriate Change Orders covering:
 - (i) changes in the Contract Price or Contract Times that are agreed to by the parties, including any undisputed sum or amount of time for Work performed in accordance with a Work Change Directive;
 - (ii) changes in Contract Price resulting from a PWC set-off, unless Contractor has duly contested such set-off;
 - (iii) changes in the Work which are: (a) ordered by PWC, (b) required because of PWC's acceptance of defective Work or PWC's correction of defective Work, or (c) agreed to by the parties, subject to the need for Design Engineer's recommendation if the change in the Work involves the design (as set forth in the Contract Documents), or other engineering or technical matters; and
 - (iv) changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results.
- (b) If PWC or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Section, it shall be deemed to be of full force and effect as if fully executed.

Section 9.08 Notification to Surety

- (a) If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

Article X. Tests, Inspections, and Approvals; Correction, Removal, or Acceptance of Defective Work

Section 10.01 Access to Work

- (a) PWC, Design Engineer, their consultants and other representatives and personnel of PWC, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

Section 10.02 Tests, Inspections, and Approvals

- (a) Contractor shall give Project Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- (b) PWC shall retain and pay for the initial services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by PWC, except those costs incurred in connection with tests or inspections of covered Work shall

be governed by the provisions of Paragraph 10.05.

- (c) If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish the required certificates of inspection or approval to PWC.
- (d) Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - (i) by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to PWC;
 - (ii) to attain PWC's and Design Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - (iii) by manufacturers of equipment furnished under the Contract Documents;
 - (iv) for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - (v) for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to PWC, as confirmed in writing by Project Engineer to Contractor.

- (e) If the Contract Documents require the Work (or part thereof) to be approved by PWC or its designee, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- (f) If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Project Engineer, Contractor shall, if requested by Project Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given PWC timely notice of Contractor's intention to cover the same and PWC had not acted with reasonable promptness in response to such notice.

Section 10.03 Defective Work

- (a) It is Contractor's obligation to assure that the Work is not defective.
- (b) PWC or its designee has the authority to determine whether Work is defective, and to reject defective Work.
- (c) Prompt notice of all defective Work of which PWC has actual knowledge will be given to Contractor.
- (d) Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if PWC has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.

- (e) When correcting defective Work, Contractor shall take no action that would void or otherwise impair PWC's special warranty and guarantee, if any, on said Work.
- (f) In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against PWC by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if PWC and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then PWC may impose a reasonable set-off against payments due.

Section 10.04 Acceptance of Defective Work

- (a) If, instead of requiring correction or removal and replacement of defective Work, PWC prefers to accept it, PWC may do so (subject, if such acceptance occurs prior to final payment, to Design Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles and will not endanger public safety).
- (b) Contractor shall pay all claims, costs, losses, and damages attributable to PWC's evaluation of and determination to accept such defective Work (such costs to be approved by PWC as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order.
- (c) If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then PWC may impose a reasonable set-off against payments due. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to PWC.

Section 10.05 Uncovering Work

- (a) PWC has discretion to require, at its initial cost, additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- (b) If any Work is covered contrary to the written request of PWC, then Contractor shall, if requested by PWC or its designee, uncover such Work for observation, and then replace the covering, all at Contractor's expense.
- (c) If PWC considers it necessary or advisable that covered Work be observed by PWC or inspected or tested by others, then Contractor, at PWC's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as PWC may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - (i) If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility PWC shall be entitled to impose a reasonable set-off against payments due.

- (ii) If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 calendar days of the determination that the Work is not defective.

Section 10.06 PWC May Stop the Work

- (a) If the Work is defective, or Contractor fails to supply sufficiently skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then PWC may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of PWC to stop the Work shall not give rise to any duty on the part of PWC to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

Section 10.07 PWC May Correct Defective Work

- (a) If Contractor fails within the time specified by PWC in a written notice from PWC to correct defective Work, or to remove and replace rejected Work as required by PWC, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then PWC may, after seven (7) calendar days written notice to Contractor, correct or remedy any such deficiency.
- (b) In exercising the rights and remedies under this Section, PWC shall proceed expeditiously. In connection with such corrective or remedial action, PWC may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which PWC has paid Contractor but which are stored elsewhere. Contractor shall allow PWC and its officers, employees, representatives, agents and other contractors, and Design Engineer and its employees and agents access to the Site to enable PWC to exercise the rights and remedies under this Section.
- (c) All claims, costs, losses, and damages incurred or sustained by PWC in exercising the rights and remedies under this Section will be charged against Contractor as set-offs against payments due. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- (d) Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by PWC of PWC's rights and remedies under this Section.

Article XI. Claims

Section 11.01 Claims Process

- (a) The following disputes between PWC and Contractor shall be submitted to the Claims process set forth in this Article:

- (i) Appeals by PWC or Contractor of Design Engineer's decisions regarding Change Proposals;
- (ii) PWC or Contractor's demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
- (iii) Disputes that Design Engineer has been unable to address because they do not involve the design (as set forth in the Contract Documents), the acceptability of the Work, or other engineering or technical matters.

Section 11.02 Submittal of Claim

- (a) The party submitting a claim shall deliver it directly to the other party to the Agreement promptly (but in no event later than 30 calendar days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 calendar days of the decision under appeal. The responsibility to substantiate a claim shall rest with the party making the claim. In the case of a claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

Section 11.03 Review and Resolution

- (a) The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party.

Section 11.04 Dispute Resolution

- (a) In the event of any dispute, controversy, or claim of any kind or nature arising under or in connection with this Agreement (a "Dispute") and involving any two or more of the following parties, PWC, Design Engineer, Contractor or any subcontractor of Contractor, the party initiating the Dispute shall serve written notice of a Dispute on the party(ies) to the dispute, and those parties shall endeavor to settle the dispute first through direct, informal discussions between the parties' selected representatives. Any such representative(s) shall have binding authority to settle the Dispute. In the event the parties do not settle the Dispute within ten (10) calendar days from the date of written notice of the Dispute, any party to the Dispute may, by written notice to the other party(ies), engage a mediator certified under the laws of the State of North Carolina to mediate the Dispute within thirty (30) calendar days of such notice. The parties to the Dispute shall attend mediation in good faith. In the event mediation is unsuccessful, any party to the dispute may initiate arbitration proceedings. Any controversy or claim arising out of or relating to the Contract Documents, or the breach thereof, shall be settled by binding arbitration administered by the American Arbitration Association under its Construction Industry Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. All of the foregoing dispute resolution procedures shall be held in Cumberland County, North Carolina. The costs of the mediator and arbitrator in a dispute resolution process shall be divided equally among the parties to the process; provided, however, PWC shall bear at least one-third of the cost if PWC is a party to the dispute resolution and the remainder of the cost shall be divided equally among the other parties

participating in the dispute resolution. PWC shall, in its contractual arrangements with Design Engineer, and Contractor shall, in its contracts with Subcontractors and they in their contracts with lower-tier subcontractors authorize and direct such parties to participate in the dispute resolution procedures set forth in this Section. Unless otherwise directed in writing by PWC, Contractor shall continue the Project and maintain compliance with the scheduling deadlines set forth in the Contract Documents during any dispute resolution proceedings. If Contractor continues to perform, PWC shall make payments due for the continued performance in accordance with this Agreement. The provisions of this Section shall not extend any applicable statutes of limitation or repose.

Article XII. Payments to Contractor; Set-Offs; Completion; Correction Period

Section 12.01 Progress Payments

- (a) The Schedule of Values will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the Project Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period. Progress payments for cost-based Work will be based on the Cost of the Work completed by the Contractor during the pay period.
- (b) Applications for Payments:
 - (i) Contractor shall submit to Project Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that PWC has received the materials and equipment free and clear, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect PWC's interest.
 - (ii) Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 - (iii) The amount of retainage for progress payments will be as stipulated in the Contract Documents.
- (c) Review of Applications:
 - (i) Project Engineer will, within ten (10) Business Days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to PWC, or return the Application to Contractor indicating in writing Project Engineer's reason(s) for refusing to recommend payment. In the latter case, the Contractor may make the necessary corrections and resubmit the Application.
 - (ii) Project Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Project Engineer to PWC, based on Project Engineer's observations of the executed Work, and on Project Engineer's review of the

Application for Payment and the accompanying data and schedules, that to the best of Project Engineer's knowledge, information, and belief:

- 1) the Work has progressed to the point indicated;
 - 2) the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work, and any other qualifications stated in the recommendation); and
 - 3) the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Project Engineer's responsibility to observe the Work.
- (iii) By recommending any such payment Project Engineer will not thereby be deemed to have represented that:
- 1) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Project Engineer in the Contract Documents; or
 - 2) there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by PWC or entitle PWC to withhold payment to Contractor.
- (iv) Neither Project Engineer's review of Contractor's Work for the purposes of recommending payments nor Project Engineer's recommendation of any payment, including final payment, will impose responsibility on Project Engineer:
- 1) to supervise, direct, or control the Work, or
 - 2) for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - 3) for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - 4) to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price.
- (v) Project Engineer may refuse to recommend the whole or any part of any payment if, in Project Engineer's opinion, it would be incorrect to make the representations to PWC outlined in this Section.
- (d) Project Engineer will recommend reductions in payment (set-offs) necessary in Project Engineer's opinion to protect PWC from loss because:
- (i) the Work is defective, requiring correction or replacement;
 - (ii) the Contract Price has been reduced by Change Orders;
 - (iii) PWC has been required to correct defective Work or has accepted defective Work in accordance with these General Conditions;
 - (iv) PWC has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - (v) Project Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

(e) Payment Becomes Due:

- (i) Twenty (20) Business Days after presentation of the Application for Payment to PWC with Project Engineer's recommendation, the amount recommended (subject to any PWC set offs) will become due, and when due will be paid by PWC to Contractor.

(f) Reductions in Payment by PWC:

- (i) In addition to any reductions in payment (set-offs) recommended by Project Engineer, PWC is entitled to impose a set-off against payment based on any of the following:
 - 1) PWC has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - 2) Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - 3) Contractor has failed to provide and maintain required bonds or insurance;
 - 4) PWC has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - 5) PWC has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - 6) the Work is defective, requiring correction or replacement;
 - 7) PWC has been required to correct defective Work or has accepted defective Work in accordance with the Contract Documents;
 - 8) the Contract Price has been reduced by Change Orders;
 - 9) an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - 10) liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or Completion of the Project; or
 - 11) there are other items entitling PWC to a set off against the amount recommended.
- (ii) If PWC imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Project Engineer, PWC will give Contractor immediate written notice stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. PWC shall promptly pay Contractor the amount so withheld, or any adjustment agreed to by PWC and Contractor if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
- (iii) Upon a subsequent determination that PWC's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due and subject to interest as provided in the Contract Documents.

Section 12.02 Substantial Completion

- (a) When Contractor considers the entire Work ready for its intended use Contractor shall notify PWC and Design Engineer in writing that the entire Work is substantially complete and request that PWC acknowledge in writing that Contractor has met Substantial Completion.

- (b) Promptly after Contractor's notification, PWC, Contractor, and Design Engineer shall make an inspection of the Work to determine the status of completion. If PWC does not consider the Work substantially complete, PWC will notify Contractor in writing giving the reasons therefor. PWC shall thereafter submit to Contractor an initial draft of punch list items to be completed or corrected before final payment.
- (c) If Design Engineer considers the Work substantially complete, Design Engineer will deliver to PWC a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Design Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. PWC shall have seven (7) Business Days after receipt of the preliminary certificate to make written objection to Design Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, PWC concludes that the Work is not substantially complete, PWC will, within fourteen (14) calendar days after submission of the preliminary certificate to PWC, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor.
- (d) At the time of receipt of the preliminary certificate of Substantial Completion, PWC and Contractor will confer regarding PWC's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by PWC. Unless PWC and Contractor agree otherwise in writing, PWC shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon PWC use or occupancy of the Work.
- (e) After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment and shall complete such items within the time specified by PWC. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- (f) PWC shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

Section 12.03 Partial Use or Occupancy

- (a) Prior to Substantial Completion of all the Work, PWC may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which PWC, Design Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by PWC for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - (i) At any time PWC may request in writing that Contractor permit PWC to use or occupy any such part of the Work that PWC believes to be substantially complete.
 - (ii) At any time Contractor may notify PWC and Design Engineer in writing that Contractor considers any such part of the Work substantially complete and request Design Engineer

- to issue a certificate of Substantial Completion for that part of the Work.
- (iii) Within a reasonable time after either such request, PWC, Contractor, and Design Engineer shall make an inspection of that part of the Work to determine its status of completion. If Design Engineer does not consider that part of the Work to be substantially complete, Design Engineer will notify PWC and Contractor in writing giving the reasons therefor.
 - (iv) No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements regarding builder's risk or other property insurance.

Section 12.04 Final Inspection

- (a) Upon written notice from Contractor that Completion of the Project has been achieved or an agreed portion thereof is complete, PWC will promptly make a final inspection with Project Engineer, Design Engineer, and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

Section 12.05 Final Payment

- (a) Application for Payment:
 - (i) After Contractor has, in the opinion of PWC, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents, and other documents, Contractor may make application for final payment.
 - (ii) The final Application for Payment shall be accompanied (except as previously delivered) by:
 - 1) all documentation called for in the Contract Documents;
 - 2) consent of the surety, if any, to final payment;
 - 3) satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to PWC free and clear or will so pass upon final payment;
 - 4) a list of all disputes that Contractor believes are unsettled; and
 - 5) complete and legally effective releases or waivers (satisfactory to PWC) required by the Contract Documents.
 - (iii) If Design Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Design Engineer will, within ten (10) Business Days after receipt of the final Application for Payment, indicate in writing Design Engineer's recommendation of final payment and present the Application for Payment to PWC for payment. Such recommendation shall account for any set-offs against payment that are necessary in Design Engineer's opinion to protect PWC from loss for the reasons stated above with respect to progress payments. At the same time Design Engineer will also give written notice to PWC and Contractor that the Work is acceptable and that Completion of the Project has been achieved. Otherwise, Design Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
 - (iv) Within thirty (30) calendar days after the presentation to PWC of the final Application for

Payment and accompanying documentation, the amount recommended by Design Engineer (less any further sum PWC is entitled to set off against Design Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by PWC to Contractor.

Section 12.06 Waiver of Claims

- (a) The making of final payment will not constitute a waiver by PWC of claims or rights against Contractor. PWC expressly reserves claims and rights arising from defective Work appearing after final inspection, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from Contractor's indemnification obligations, or from Contractor's continuing obligations under the Contract Documents.
- (b) The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against PWC other than those pending matters that have been duly submitted or appealed under the provisions of the Contract Documents.

Section 12.07 Correction Period

- (a) If within one (1) year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to PWC and in accordance with PWC's written instructions:
 - (i) correct the defective repairs to the Site or such other adjacent areas;
 - (ii) correct such defective Work;
 - (iii) if the defective Work has been rejected by PWC, remove it from the Project and replace it with Work that is not defective, and
 - (iv) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- (b) If Contractor does not promptly comply with the terms of PWC's written instructions, or in an emergency where delay would cause serious risk of loss or damage, PWC may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- (c) In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date only as provided in the Contract Documents.
- (d) Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Article XII, the correction period hereunder with

respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- (e) Contractor's obligations under this Article XII are in addition to all other obligations and warranties. The provisions of this Article XII shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

Article XIII. Suspension of Work and Termination

Section 13.01 PWC May Suspend Work

- (a) At any time and without cause, PWC may suspend the Work or any portion thereof for a period of not more than 90 consecutive calendar days by written notice to Contractor and Design Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than thirty (30) calendar days after the date fixed for resumption of Work.

Section 13.02 PWC May Terminate for Cause

- (a) The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - (i) Contractor's continued failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 - (ii) Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - (iii) Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - (iv) Contractor's repeated disregard of the authority of PWC, Project Engineer, or Design Engineer.
- (b) If one or more of the events identified in Paragraph 13.02(a) occurs, then after giving Contractor (and any surety) ten (10) calendar days written notice that PWC is considering a declaration that Contractor is in default and termination of the Agreement, PWC may proceed to:
 - (i) declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - (ii) enforce the rights available to PWC under any applicable performance bond.
- (c) Subject to the terms and operation of any applicable performance bond, if PWC has terminated the Contract for cause, PWC may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which PWC has paid Contractor but which are stored elsewhere, and complete the Work as PWC may deem expedient.
- (d) PWC may not proceed with termination of the Contract under Paragraph 13.02(b) if Contractor within seven (7) calendar days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure and such efforts

are agreed to by PWC.

- (e) If PWC proceeds as provided in Paragraph 13.02(b), Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by PWC, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to PWC. Such claims, costs, losses, and damages incurred by PWC will be reviewed by PWC as to their reasonableness and, when so approved by PWC, incorporated in a Change Order.
- (f) Where Contractor's services have been so terminated by PWC, the termination will not affect any rights or remedies of PWC against Contractor then existing or which may thereafter accrue, or any rights or remedies of PWC against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by PWC will not release Contractor from liability.
- (g) The provisions of any applicable payment or performance bond shall govern over any inconsistent provisions of this Section.

Section 13.03 PWC May Terminate For Convenience

- (a) Upon seven (7) calendar days written notice to Contractor, PWC may, without cause and without prejudice to any other right or remedy of PWC, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - (i) completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - (ii) expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - (iii) other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- (b) Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

Section 13.04 Contractor May Stop Work or Terminate

- (a) If, through no act or fault of Contractor, (1) the Work is suspended for more than ninety (90) consecutive calendar days by PWC or under an order of court or other public authority or (2) PWC fails for sixty (60) calendar days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven (7) calendar days written notice to PWC, and provided PWC does not remedy such suspension or failure within that time, terminate the Contract and recover from PWC payment on the same terms as provided in this Article.
- (b) In lieu of terminating the Contract and without prejudice to any other right or remedy, if PWC has failed for thirty (30) calendar days to pay Contractor any sum finally determined to be due, Contractor may, seven (7) calendar days after written notice to PWC, stop the Work until payment is made of all such amounts due Contractor, including interest thereon.

The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

Section 13.05 Morality

- (a) If, in the sole opinion of PWC, at any time Contractor or any of its owner(s) or employee(s) or agent(s) (each party, owner, employee, and agent is an "Actor") engages in any one or more actions that bring disrepute, contempt, scandal, or public ridicule to the Actor or subject the Actor to prosecution or offend the community or public morals or decency or denigrate individuals or groups in the community served by PWC or are scandalous or inconsistent with community standards or good citizenship or may adversely affect PWC's finances, public standing, image, or reputation or are embarrassing or offensive to PWC or may reflect unfavorably on PWC or are derogatory or offensive to one or more employee(s) or customer(s) of PWC, PWC may immediately upon written notice to Contractor terminate the Agreement, in addition to any other rights and remedies that PWC may have pursuant to the Contract Documents or at law or in equity.

Article XIV. Miscellaneous

Section 14.01 Additional General Terms and Conditions

- (a) Contractor shall be subject to any additional terms and conditions for this Project as set forth in the applicable Appendices as specific in the Agreement, which is incorporated by reference as if set forth word-for-word herein.

Section 14.02 Giving Notice

- (a) Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - (i) delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended;
 - (ii) delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice; or
 - (iii) sent to PWC or Contractor's designee(s) via email, with a confirmation of receipt.

Section 14.03 Computation of Times

- (a) When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

Section 14.04 Cumulative Remedies

- (a) The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which

General Conditions (Rev 7/11/2023)

are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

Section 14.05 Limitation of Damages

- (a) With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither PWC nor Design Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

Section 14.06 No Waiver

- (a) A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or any other provision of the Contract Documents.

Section 14.07 Survival of Obligations

- (a) All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement or termination of the services of Contractor.

Section 14.08 Controlling Law

- (a) The Agreement shall be governed by the law of the State of North Carolina.

Section 14.09 Headings

- (a) Article and paragraph headings, numbers, and letters are inserted for convenience only and do not constitute parts of these General Conditions.

DIVISION 1

PERFORMANCE BOND

Date of Execution: _____

Name of Principal: _____

(Contractor)

Name of Surety: _____

Name of Contracting

Body: Fayetteville Public Works Commission, Fayetteville, N.C.

Amount of Bond: _____

**PROJECT: PWC2425072 - COATING REPAIRS TO THE 1 MG CLINTON ROAD
ELEVATED WATER STORAGE TANK**

KNOW ALL MEN BY THESE PRESENTS, That We, the Principal and Surety above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these present.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal entered into a certain Contract with the Contracting Body, identified as shown above and hereto attached.

NOW, THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said Contract during the original term of said Contract and any extensions there of that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any Guaranty required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under the several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Executed in _____ counterparts.

PWC2425072 - COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK

Witness:

(Proprietorship of Partnership)

By:

Title:

(Corporate Secretary or
Assistant Secretary, Only)

CONTRACTOR:

(Trade or Corporate Name)

By:

Title:

(Owner, Partner, Corporate President or
Vice-President, Only)

(CORPORATE SEAL)

Witness:

Countersigned:

(N.C. Licensed Resident Agent)

SURETY COMPANY:

(Surety Company Name)

By:

Title:

(Attorney in Fact)

(SURETY CORPORATE SEAL)

PAYMENT BOND

Date of Execution: _____

Name of Principal: _____

(Contractor)

Name of Surety: _____

Name of Contracting

Body: Fayetteville Public Works Commission, Fayetteville, N.C.

Amount of Bond: _____

**PROJECT: PWC2425072 - COATING REPAIRS TO THE 1 MG CLINTON ROAD
ELEVATED WATER STORAGE TANK**

KNOW ALL MEN BY THESE PRESENTS, that We, the PRINCIPAL and Surety above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal entered into a certain Contract with the Contracting Body, identified as shown above and hereto attached.

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under the several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Executed in _____ counterparts.

Witness:

CONTRACTOR:

(Proprietorship of Partnership)

(Trade or Corporate Name)

By:

By:

Title:

Title:

(Corporate Secretary or
Assistant Secretary, Only)

(Owner, Partner, Corporate President or
Vice-President, Only)

(CORPORATE SEAL)

Witness:

SURETY COMPANY:

(Surety Company Name)

By:

Countersigned:

Title:

(N.C. Licensed Resident Agent)

(Attorney in Fact)

(SURETY CORPORATE SEAL)

**POWER OF ATTORNEY
(ATTACH)**

**CERTIFICATE(S) OF INSURANCE
(Attach)**

NOTICE TO PROCEED

TO: _____

Date: _____

**PROJECT: PWC2425072 - COATING REPAIRS TO THE 1 MG CLINTON ROAD
ELEVATED WATER STORAGE TANK**

You are hereby notified to commence work in accordance with the Contract dated
_____, 2025, on or before _____, 2025, and you are to
complete the WORK within the **contract period** thereafter. The date of final completion
therefore is _____.

FAYETTEVILLE PUBLIC WORKS COMMISSION

BY: _____

Nikole Bohannon

Procurement Manager

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED

is hereby acknowledged this the _____ day of _____, 2025.

(CONTRACTOR)

BY: _____

TITLE: _____

- END OF SECTION -

PWC2425072 - COATING REPAIRS TO THE 1 MG CLINTON ROAD ELEVATED WATER STORAGE TANK

SECTION C– TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS



FLEMING
& ASSOCIATES, PA

1004 HAY STREET
FAYETTEVILLE, NC 28305
TEL 910-433-2825
FAX 910-433-2604

NC LICENSE NO. C-2828



04/14/25

COATING REPAIRS TO THE 1,000,000 GALLON CLINTON ROAD ELEVATED WATER STORAGE TANK

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The 1,000,000-gallon capacity hydropillar elevated water storage tank is located at 2510 Clinton Road, Fayetteville, NC 28312. The Work includes:
 - a. Surface preparation and painting of all exterior surfaces and all interior dry portions of the tank for the Fayetteville Public Works Commission (“PWC”). See Section 4 for a detailed painting schedule and enclosed exhibit drawing sheet S2.
 - b. Structural repairs with associated spot coating repairs will be performed at (3) areas in the interior wet portion of the tank. See enclosed repair drawing S1.
 - c. Supplemental vent screens are to be added at all openings in the dry portions of the tank to reduce insect entrance to the dry portions of the tank – screen gauge with non-corrosive ring clamps are to be selected by the owner and included with the bid.
 - d. At the conclusion of work the interior wet portions of the tank will be sanitized per the requirements of Fayetteville PWC.

1.2 REFERENCE SPECIFICATIONS AND STANDARDS

- A. OWNER’S decision shall be final as the interpretation and/or conflict between any of the referenced specifications and standards contained herein.
- B. Without limiting the general aspects of other requirements of these specifications, all surface preparation, coating and painting of surfaces, and materials shall conform to the applicable requirements of the Society for Protective Coatings (SSPC), NACE International (NACE), International Concrete Repair Institute, Inc. (ICRI), Association for Materials Protection and Performance (AMPP), the National Sanitation Foundation (NSF), the American Water Works Association (AWWA), and the selected material manufacturer’s instructions.
- C. Definitions and abbreviations:
 - 1. *OWNER*: The public entity with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be provided. OWNER is the Fayetteville Public Works Commission (“PWC”) or an appointed OWNER’S representative such as an Engineer.
 - 2. *Agreement*: The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Agreement supersedes prior negotiations, representations, or agreements, whether written or oral.
 - 3. *CONTRACTOR*: The individual or entity with whom OWNER has entered into the Agreement.
 - 4. *Work*: The entire completed services or the various separately identifiable parts thereof required to be provided under the RFP Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such service, and furnishing, installing, and incorporating all materials and equipment into such

service, all as required by the RFP Documents

5. *AMPP*: Association for Materials Protection and Performance.
 6. *SSPC*: The Society for Protective Coatings (formerly Steel Structures Painting Council)
 7. *ASTM*: American Society for Testing & Materials.
 8. *ANSI*: American National Standards Institute.
 9. *NACE*: National Association of Corrosion Engineers.
 10. *NSF*: National Sanitation Foundation.
 11. *AWWA*: American Water Works Association.
 12. *ICRI*: International Concrete Repair Institute, Inc.
 13. *PDS*: Product Data Sheet
 14. *MSDS*: Material Safety Data Sheet
 15. *OSHA*: Occupational Safety and Health Administration
 16. *DFT*: Dry Film Thickness. Units shall be in Mils (1 mil = 0.001 inches).
 17. *Coating*: Liquid, powder, or mastic composition that has been converted to a solid, durable, and functional adherent film after application.
 18. *Potable water*: Water that is safe and satisfactory for drinking and cooking.
 19. *Stripe Coat*: A coat of paint applied to specified areas such as edges to welds before or after a full coat is applied to the entire surface.
 20. *Exterior surfaces*: Exterior surfaces, excluding inaccessible areas, of the tank roof, shell, pedestal, legs, accessories, and appurtenances that are exposed to the elemental atmosphere.
 21. *Inaccessible areas*: Areas of the finished structure that, by virtue of the configuration of the completed structure, cannot be accessed to perform surface preparation or coating application.
 22. *Interior wet surfaces*: Interior surfaces, excluding inaccessible areas, of the tank roof, shell, bottom, accessories, and appurtenances that are exposed to the stored water or its vapor.
 23. *Interior dry surfaces*: Interior surfaces of the finished structure, excluding inaccessible areas, that are not exposed to the elemental atmosphere, the stored water, or its vapor.
 24. *Pot life*: The period of time, after mixing the components together, that the coating remains usable with no decrease in the desired properties or performance.
 25. *MWL*: Maximum water level.
- D. This section contains references to the governing standards and documents listed below. They are a part of this section as specified and modified. In the case of conflict between the requirements of this section and those of the listed documents, the more stringent of the requirements shall prevail.

Unless otherwise specified, references to documents shall mean the documents in effect at the time of receipt of Bids. If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization or, if there are no replacement documents, the last version of the document before it was discontinued. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, whether or not the document has been superseded by a version with a later date, discontinued, or replaced.

Referenced publications found within this specification shall be the latest revision unless otherwise specified; and applicable parts of the publications listed below shall become a part of this specification as if fully included:

1. North Carolina State Building Code – 2018
2. North Carolina Administrative Code Rules Governing Public Water Systems Title 15A

- Subchapter 18C, Sections .0100 through .2200, Updated February 1, 2022 (“Green Book”)
3. ANSI/AWWA Standard D102-24 – Coating Steel Water-Storage Tanks
 4. ANSI/AWWA Standard D100-21 - Welded Carbon Steel Tanks for Water Storage
 5. AWWA Manual M42 – Steel Water-Storage Tanks.
 6. NSF/ANSI/CAN 600-2024 (“NSF 600”) – Health Effects Evaluation and Criteria for Chemicals in Drinking Water, inclusive of:
 - a. NSF 60-2024 – Drinking Water Treatment – Chemicals - Health Effects
 - b. NSF 61-2024 – Drinking Water System Components – Health Effects
 7. ASTM International (ASTM):
 - i. ASTM B117 – Salt Spray (Fog)
 - ii. ASTM C140 – Water Absorption (Applied to Cast Mortar Cubes)
 - iii. ASTM C307 – Tensile Strength, Elongation, Modulus of Elasticity
 - iv. ASTM C531 – Thermal Expansion
 - v. ASTM C579 – Compressive Strength
 - vi. ASTM C580 – Flexural Strength and Modulus of Elasticity
 - vii. ASTM C67 – Water Absorption (Applied to Fire Clay Brick)
 - viii. ASTM C793 – Accelerated Weathering
 - ix. ASTM C97 – Water Absorption (Applied to Ohio Sandstone)
 - x. ASTM D1014 – Exterior Exposure
 - xi. ASTM D2047 – Coefficient of Friction
 - xii. ASTM D2240 - Hardness
 - xiii. ASTM D2247 - Humidity
 - xiv. ASTM D2370 – Tensile Strength, Elongation, Modulus of Elasticity
 - xv. ASTM D2794 - Impact
 - xvi. ASTM D3273 – Fungal/Mold/Mildew Resistance
 - xvii. ASTM D4060 - Abrasion
 - xviii. ASTM D4141, Method C (EMMAQUA) – Exterior Exposure
 - xix. ASTM D4541 – Adhesion
 - xx. ASTM D4585 – Humidity
 - xxi. ASTM D4587 – QUV Exposure
 - xxii. ASTM D522 – Flexibility and Elongation
 - xxiii. ASTM D5590 – Fungal/Mold/Mildew/Algal Resistance
 - xxiv. ASTM D5894 – Cyclic Salt Fog/UV Exposure
 - xxv. ASTM D624 – Tear Strength
 - xxvi. ASTM D638 – Tensile Strength, Elongation, Modulus of Elasticity
 - xxvii. ASTM D648 – Deflection Temperature
 - xxviii. ASTM D6695 – Xenon Arc Weathering
 - xxix. ASTM D695 – Compressive Strength
 - xxx. ASTM D7091 – Dry film thickness
 - xxxi. ASTM D7234 - Adhesion
 - xxxii. ASTM D790 – Flexural Strength and Modulus of Elasticity
 - xxxiii. ASTM D870 – Immersion
 - xxxiv. ASTM G85 – Prohesion
 8. Federal Specification (FED): FED TT-C-555B - Wind Driven Rain

1.3 CONTRACTOR

- A. The CONTRACTOR shall have five (5) years practical experience and successful history in the application of specified products in similar projects. The CONTRACTOR shall substantiate this requirement by furnishing a list of references and job completions.

- B. The CONTRACTOR and its applicator must successfully demonstrate to the product manufacturer the ability to apply the material correctly and within the confines of the specifications. The CONTRACTOR must provide a letter from the manufacturer stating their acceptance of the CONTRACTOR for this project to apply these products. This letter is to be submitted to the Engineer and OWNER prior to commencing Work.
- C. The CONTRACTOR shall possess the applicable, current license(s) to perform the Work as herein described and as specified by local, state and federal laws. The CONTRACTOR'S license(s) shall appear in the lower left-hand corner of the envelope containing the bids.
- D. The CONTRACTOR shall provide a nine (9) square foot site mockup of each selected paint system as a representation of how the system shall be installed and its final appearance, which is to be approved by the OWNER before any further Work is started. This mockup shall be used to test for adequate adhesion, if required by the Engineer. This approved mockup will be the quality standard for the project. The mockup shall be installed on a vertical surface at the exterior, a vertical surface at the interior, and an overhead surface at the underside of the tank bowl, near the interior ladder, three (3) locations total.

1.4 QUALITY ASSURANCE

A. General:

1. Quality assurance procedures and practices shall be utilized to monitor all phases of surface preparation, application, and inspection throughout the duration of the project. Procedures or practices not specifically defined herein may be utilized provided they meet recognized and accepted professional standards and are approved by the OWNER.
2. The CONTRACTOR shall submit with their bid package a listing of key personnel proposed for this project, including the following positions: Project Manager, Quality Control Manager, Foreman, as well as any Subcontractors - such as 3rd party inspector(s) - that will be utilized. CONTRACTORS who fail to submit this information along with their bid package will not be considered for the subject project. The Engineer and OWNER reserve the right to reject any personnel employed by the CONTRACTOR. After award of contract, if replacement personnel for any of the above supervisory positions must be used, approval must be obtained from the Engineer and OWNER prior to commencement of Work.
3. Clarification shall be requested promptly from the OWNER when instructions are lacking, conflicts occur in the Specifications, or the procedure seems improper or inappropriate for any reason. The OWNER'S decision shall be final as the interpretation and/or conflict between any of the referenced specifications and standards contained herein.

B. Submittals:

1. Submit manufacturer's literature and other data as required to certify compliance with requirements and systems specified herein. Minimum data submittals are:
 - i. The selected coating manufacturer shall submit a letter certifying that all aspects of the selected coating system for the interior wet portions of the tank are NSF 600 compliant prior to ordering materials for the job.
 - ii. Blast equipment and media.
 - iii. Rigging system to be used for elevated or other areas of the project inaccessible from surface level. Submittal should be inclusive of attachment points and methods (permanent or temporary) to the structure, and shop drawings for the system utilized.
 - iv. Coating application equipment including spray equipment (pumps, hoses, application tip sizes, etc.) rollers with nap sizes where appropriate.
 - v. Product literature and data of all coating materials to be used.
 - vi. Hazardous material disposal documentation if applicable.
 - vii. Job personnel and certifications. Personnel certifications such as AMPP (formerly NACE) certification level is to include requisite paperwork.
2. Any necessary shop drawings for Work denoted in specifications or Drawings.
3. Color chart for selection by OWNER. Manufacturer's color charts shall be submitted to the OWNER at least ten (10) days prior to paint application.
4. VOC (Volatile Organic Compound) Requirements: Submit manufacturer's certification that paints and coatings comply with federal, state, and local requirements, whichever is more stringent, for VOC.

C. Delivery Handling, and Storage:

1. Deliver all material to site in original, new, unopened containers, labeled and bearing manufacturer's name and stock number, product and brand name, contents by volume for major constituents, instructions for mixing and reducing, and application instruction. Materials exceeding storage life recommended by the manufacturer will be rejected.
2. Provide adequate storage facilities designated exclusively for the purpose of paint storage and mixing. Facility area shall be located away from open flames, be well ventilated and be capable of maintaining ambient storage temperature of no less than 45°F, or as required by product manufacturer, whichever is more stringent.
3. Coating material shall be deemed unacceptable if it has been allowed to freeze.
4. Paint, coatings, reducing agents, and other solvents must be stored in original containers until opened; if not re-sealable, then must be transferred to UL approved safety containers. Provide proper ventilation, personal protection, and fire protection for storage and use of same.
5. On site gasoline storage tank will be safely located, grounded, and identified with proper labeling.
6. Comply with requirements set forth by the Occupational Safety and Health Administration (OSHA) for storage and use of painting materials and equipment.
7. CONTRACTOR shall provide all MSDS information for any materials that will be brought on site, including solvents for cleaning purposes. CONTRACTOR must receive approval prior to bringing material onsite. CONTRACTOR must have

MSDS sheets for each material available on site at all times. All MSDS must remain on site for the duration of the project.

D. Application:

1. Surface preparation will be based upon comparison with: "Pictorial Surface Preparation Standards for Painting Steel Surfaces", SSPC-Vis-1 and ASTM Designation D2200; "Standard Methods of Evaluating Degree of Rusting on Painted Steel Surfaces" SSPC-Vis-2 and ASTM Designation D610; "Visual Standard for Surfaces of New Steel Airblast Cleaned with Sand Abrasive" or "Guideline for Selecting and Specifying Concrete Surface Preparation for Sealers, Coating and Polymer Overlays," ICRI CSP Surface Profile Chips, as well as other pertinent sections of this specification and the Drawings.
2. Workmanship shall be performed by skilled workers thoroughly trained in necessary crafts and completely familiar with specific requirements and methods specified herein.
3. High pressure washing or blasting shall be performed only by personnel dedicated to quality. The CONTRACTOR will be asked to remove anyone from the work force who is observed performing unsatisfactory or unacceptable Work/results.
4. All coatings will be applied only by personnel dedicated to quality and proven capable of proper applications of each material. Areas are to be protected as required to guarantee cut-in areas are neat and not recklessly sprayed with various colors. Final appearance is expected to be of proper thickness, smoothness, and sheen. Thin, rough, and flat areas in appearance will be unacceptable. The CONTRACTOR will be asked to remove anyone from the work force who is observed performing unsatisfactory or unacceptable Work/results.
5. No coating or paint shall be applied when the surrounding air temperature or the temperature of the surface to be coated is below the minimum required temperature for the specified product; to wet or damp surfaces or in fog or mist; when the temperature is less than 5°F above the dewpoint; when the air temperature is expected to drop below 40°F within six hours after application of coating. Dewpoint shall be measured by use of an approved instrument such as a sling psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables. If above conditions are prevalent, coating or painting shall be delayed or postponed until conditions are favorable. The day's coating or painting shall be completed in time to permit the film sufficient drying time prior to damage by atmospheric conditions.
6. No coating shall be applied unless the relative humidity is below 85%.
7. The CONTRACTOR is to provide ventilation for interior locations if required to establish adequate environmental conditions for coating application and curing, and/or OSHA regulations. Any ventilation to be installed is to be submitted in a plan of Work by the CONTRACTOR to the OWNER/Engineer for review prior to commencing Work.

E. Inspections:

1. The CONTRACTOR shall furnish, until final acceptance of coating and painting, inspection devices in good working condition for detection of holidays and

measurement of wet and dry-film thickness of coating. The CONTRACTOR shall also furnish U.S. Department of Commerce; National Bureau of Standard certified thickness calibration plates to test accuracy of dry film thickness gauges. All necessary testing equipment shall be made available for the OWNER'S use at all times until final acceptance of application.

2. All parties, to include the OWNER or OWNER'S representative, CONTRACTOR, applicator, installer, any Subcontractors and the product manufacturer, shall meet a minimum of 72 hours prior to any Work is started to review the specification and discuss job specific expectations, needs, and requirements.
3. See "General Conditions," Section 2.04 for specific information on the preconstruction conference.
4. See Section 3.4 of the Technical Specification for information regarding hold point inspections throughout project.

1.5 SAFETY AND HEALTH REQUIREMENTS

- A. In accordance with requirements set forth by regulatory agencies applicable to the construction industry and manufacturer's printed instructions and appropriate technical bulletins and manuals, the CONTRACTOR shall provide and require use of personnel protective lifesaving equipment for persons working on or about the project site.
- B. Head and face protection and respiratory device equipment shall include protective helmets, which shall be worn by all persons while in the vicinity of the Work. In addition, workers engaged in or near the Work during blasting operations shall wear eye and face protection devices and air purifying half-masks or mouthpiece respirators with appropriate filters. Barrier creams shall be used on any exposed areas of skin.
- C. Where appropriate, all solvent vapors shall be completely removed by suction-type exhaust fans and blowers before placing in operating service. Where ventilation is used to control hazardous exposure, all equipment shall be explosion-proof. Ventilation shall reduce the concentration of air contaminant to the degree a hazard does not exist. Air circulation and exhausting of solvent vapors shall be continued until coatings have fully cured.
- D. Whenever the occupational noise exposure exceeds maximum allowable sound levels, the CONTRACTOR shall provide and require the use of approved ear protective devices.

PART 2 - PRODUCTS

2.1 GENERAL

- A. This is a performance-based specification and materials specified are those that have been evaluated for the specific service. Products of the Tnemec Co. are noted as the "basis of design" product and are listed to establish a standard of quality. Equivalent materials of other manufacturers may be substituted by the CONTRACTOR upon written approval of

the Owner and Engineer. Equal products shall include manufacturer's literature for each product giving the name, product number, generic type, descriptive information, solids by volume, recommended dry film thickness, and certified test reports showing equivalent or better performance criteria of the basis of design products indicated herein. No product will be considered that will decrease film thickness or offer a change in the generic type of coatings specified. In addition, a list of five similar projects shall be submitted in which each product has been used and rendered satisfactory service.

- B. No substitution will be considered unless request for approval has been submitted by the bidder and has been received by Engineer at least five days prior to bid closing date. The burden of proof of the merit of the proposed substitute is upon the bidder. The OWNER'S decision of approval or disapproval of the proposed substitute shall be final.

2.2 INTERIOR DRY "IMMERSION" COATING SYSTEM

All existing coatings will be removed at these locations and a complete paint system will be installed. The coating system and required surface preparation at these locations shall be:

Surface Preparation:

SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum 1.5 angular mil surface profile. Surface shall be clean and dry. See section on surface preparation for additional information.

1st Coat:

Zinc-Filled Modified Aromatic Polyurethane Primer applied at 2.5 – 3.5 dry mils.

Basis of design product: Tnemec Series 1 Omnithane.

Stripe Coat:

Polyamidoamine Epoxy applied at 4.0 – 6.0 dry mils.

Basis of design product: Tnemec Series N69 Hi-Build Epoxoline.

2nd Coat:

Polyamidoamine Epoxy applied at 4.0 – 6.0 dry mils.

Basis of design product: Tnemec Series N69 Hi-Build Epoxoline.

3rd Coat:

Polyamidoamine Epoxy applied at 4.0 – 6.0 dry mils.

Basis of design product: Tnemec Series N69 Hi-Build Epoxoline.

2.3 INTERIOR DRY "NON-IMMERSION" COATING SYSTEM

Existing well adhered interior coatings will remain and an overcoat system will be installed. The coating system and required surface preparation at these locations shall be:

Base Bid Surface Preparation:

Power-Wash with a minimum 3,500 PSI and a rotating turbo nozzle to remove all loose paint, loose rust, dirt, debris, and other foreign matter. SSPC-SP15 Commercial Grade Power Tool Cleaning to all bare metal and feather any edges smooth. Surface shall be clean and dry.

Alternative Surface Preparation (priced separately):

SSPC-SP 7/NACE 4 Brush-Off Blast Clean. SSPC-SP6/NACE 3 Commercial Blast to any bare metal areas and feather any edges smooth. Surface shall be clean and dry.

Primer:

Spot Prime all cleaned bare metal with a Polyamidoamine Epoxy applied at 4.0 – 6.0 dry mils.

Basis of design product: Tnemec Series N69 Hi-Build Epoxoline II.

1st Full Coat:

Polyamidoamine Epoxy applied at 4.0 – 6.0 dry mils.

Basis of design product: Tnemec Series N69 Hi-Build Epoxoline.

2.4 INTERIOR – SEALANTS

Not used.

2.5 INTERIOR WET SPOT REPAIR COATING SYSTEM

At three spot locations in the interior wet/immersed portions of the tank receiving repair (spot repair at the top of the inside tank ladder, spot repair at overflow drain weir box, spot repair at the roof manhole access) existing interior coatings will be minimally removed as required and a spot repair paint system will be installed. Coating system shall be NSF 600 compliant and meet the minimum requirements of AWWA Inside Coating System (ICS) No.1, as referenced in AWWA D102. ISC-1 is a two-coat, two-component epoxy coating system.

Surface Preparation:

SSPC-SP11 Power-Tool Cleaning to Bare Metal and create a minimum 1.5 angular mil surface profile. Feather edges smooth and mechanically abrade tightly adhered adjacent coatings. Surface shall be clean and dry. See section on surface preparation for additional information.

1st Spot Coat:

Phenalkamine Epoxy applied at 6.0 – 8.0 dry mils.

Basis of design product: Tnemec Series 21 Epoxoline.

2nd Spot Coat:

Phenalkamine Epoxy applied at 6.0 – 8.0 dry mils.

Basis of design product: Tnemec Series 21 Epoxoline.

2.6 EXTERIOR COATING SYSTEM

An exterior overcoat is to be provided for all components of the tank unless specifically excluded in the coating schedule. The coating system and required surface preparation at these locations shall be:

Surface Preparation:

Minimum surface preparation of bare steel or previously painted steel requires a cleanliness level as defined by SSPC-SP WJ-4/NACE WJ-4 Light Cleaning by use of Low Pressure Water Cleaning (LP WC) between 3,500 and 5,000 psi using a 0 degree rotating nozzle.

If all visible contaminants, loose mill scale, loose rust and other corrosion products, and loose paint have not been removed, SSPC-SP2 Hand Tool Cleaning or SSPC-SP3 Power Tool Cleaning should be employed until the surface cleanliness definition is met.

Prime Coat

The surface shall be clean and dry before painting.

Spot prime all corrosion, lifting film/edges, cracking/checking or film issue areas with a Mastic Waterborne Acrylic applied at 6.0 – 8.0 dry mils.

Basis of design spot prime product is Tnemec Series 118 UniBond Mastic.

1st Coat:

Mastic Waterborne Acrylic applied at 6.0 – 8.0 dry mils.

Basis of design product: Tnemec Series 118 Uni-Bond Mastic.

2nd Coat:

Aliphatic Acrylic Polyurethane applied at 2.5 – 3.0 dry mils.

Basis of design product: Tnemec Series 1095 Endura Shield.

3rd Coat:

Advanced Thermoset Solution Fluoropolymer applied at 2.5 – 3.5 dry mils.

Basis of design product: Tnemec Series 700 HydroFlon.

Sealants:

Fill all gaps between the concrete foundation and the bottom plates of the steel tank with a Modified Polyurethane. Overlap 2 inches on beyond both sides of the gap.

Basis of design product: Tnemec Series 265 Elasto-Shield TG.

Exposed Concrete Elements:

The concrete foundation shall be cleaned and shall receive two coats of Mastic Waterborne Acrylic applied at 10.0 – 14.0 dry mils.

Basis of design product: Tnemec Series 154.

2.7 Roll-up aluminum door

The inside and outside of the roll-up aluminum door coating system and required surface preparation shall be:

Surface Preparation:

SSPC-SP16 Brush-Off Blast Cleaning of Coated and Uncoated Non-Ferrous Metals. This includes removal of existing coatings and a minimum 1.5 mil angular surface profile.

If all visible contaminants, loose mill scale, loose rust and other corrosion products, and loose paint have not been removed, SSPC-SP2 Hand Tool Cleaning or SSPC-SP3 Power Tool Cleaning should be employed until the surface cleanliness definition is met.

1st Coat:

Polyamide Epoxy applied at 4.0 – 6.0 dry mils.

Basis of design product: Tnemec Series 66 Hi-Build Epoxoline applied at 4.0 – 6.0 dry mils.

2nd Coat:

Aliphatic Acrylic Polyurethane applied at 2.0 – 3.0 dry mils.

Basis of design product: Tnemec Series 1095 Endura-Shield applied at 2.0 – 3.0 dry mils.

PART 3 – EXECUTION

3.1 GENERAL

- A. An AMPP (formerly NACE) certified technical representative from the paint manufacturer shall visit the job site to support the CONTRACTOR'S personnel or the OWNER as needed and/or requested. Visits are to be made on a weekly basis as a minimum or as needed to review hold points for the OWNER (see Section 3.4). Additional visits shall be made as needed and/or requested by the OWNER or CONTRACTOR. The CONTRACTOR shall provide a 24-hour notice for each hold point review.
- B. All surface preparation, coating and painting shall conform to applicable standards of the AMPP, SSPC, NACE, ICRI, and the manufacturer's printed instructions. Material applied prior to approval of the surface by the OWNER shall be removed and reapplied to the satisfaction of the OWNER at the expense of the CONTRACTOR.
- C. All Work shall be performed by skilled craftsmen qualified to perform the required Work in a manner comparable with the best standards of practice. Continuity of personnel shall be maintained, and transfers of key personnel shall be coordinated with the OWNER.
- D. The CONTRACTOR shall provide a competent supervisor satisfactory to the OWNER, at the work site during cleaning and application operations. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications, instructions, directions, notices given to the supervisor by the OWNER shall be binding to the CONTRACTOR.

- E. The CONTRACTOR'S coating and painting equipment shall be designed for application of materials specified and shall be maintained in first class working condition. Compressors shall have suitable traps and filters to remove water and oils from the air. CONTRACTOR'S equipment shall be subject to approval of the OWNER.
- F. The CONTRACTOR shall keep the area Work and the surrounding environment in a clean condition. The CONTRACTOR shall not permit materials to accumulate as to constitute a nuisance or hazard to the accomplishment of the Work, the operation of the existing facilities, or nuisance to the surrounding environment.

3.2 SURFACE PREPARATION

- A. The latest revision of the following surface preparation specifications of SSPC and NACE shall form a part of this specification:
 - 1. Solvent Cleaning (SSPC-SP1): Removal of oil, grease, soil and other contaminants by use of solvents, emulsions, cleaning compounds, steam cleaning or similar materials and methods which involve a solvent or cleaning action.
 - 2. Power Tool Cleaning (SSPC-SP3): Removal of loose rust, mill scale and loose paint to the degree specified, by power tool chipping, descaling, sanding, wire brushing and grinding.
 - 3. Brush-Off Blast Cleaning (SSPC-SP7/NACE 4): Brush-off blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, loose mill scale, loose rust, and loose coating. Tightly adherent mill scale, rust, and coating may remain on the surface. Mill scale, rust, and coating are considered tightly adherent if they cannot be removed by lifting with a dull putty knife after abrasive blast cleaning has been performed.
 - 4. Commercial Blast Cleaning (SSPC-SP6/NACE 3): Blast cleaning until at least 66 percent of each element of surface area is free of all visible residues.
 - 5. Near-White Metal Blast Cleaning (SSPC-SP10/NACE 2): Blast cleaning to nearly white metal cleanliness, until at least 95 percent of each element of surface area is free of all visible residues.
 - 6. Power Tool Cleaning to Bare Metal (SSPC-SP11): This standard covers the requirements for power tool cleaning to produce a bare metal surface and to retain or produce a minimum 25 micrometer (1.0 mil) surface profile. This standard is suitable where a roughened, clean, bare metal surface is required, but where abrasive blasting is not feasible or permissible.
 - 7. Commercial Grade Power Tool Cleaning (SSPC-SP15): This standard covers the requirements for power tool cleaning to provide a commercial grade power tool

cleaned steel surface and to retain or produce a minimum 25 micrometers (1.0 mil) surface profile.

8. Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals (SSPC-SP 16). This standard covers surface preparation of coated or uncoated metal surfaces other than carbon steel prior to the application of a protective coating system.
9. Waterjet Cleaning of Metals – Light Cleaning (SSPC-SP WJ-4 / NACE WJ-4)
10. Surface Preparation of Concrete (SSPC-SP13/NACE No.6): This standard gives requirements for surface preparation of concrete by mechanical, chemical, or thermal methods prior to the application of bonded protective coating or lining systems.
11. SSPC PA1 – Shop, field, and maintenance coating of metals.

B. Blast media and cleaning:

1. Blast cleaning for all surfaces shall be by dry method unless otherwise directed.
2. Particle size of abrasives used in blast cleaning shall be that which will produce a 1.5 – 3.0 mil (37.5 microns – 76.2 microns) surface profile or in accordance with recommendations of the manufacturer of the specified coating or paint system to be applied.
3. Abrasive used in blast cleaning operations shall be new, washed, graded and free of contaminants that would interfere with adhesion of coating or paint and shall not be reused unless specifically approved by the Engineer.
4. During blast cleaning operations, caution shall be exercised to insure that surrounding existing coatings, paint, and equipment are not exposed to abrasion from blast cleaning.
5. The CONTRACTOR shall keep the area of Work and the surrounding environment in a clean condition. He shall not permit blasting materials to accumulate as to constitute a nuisance or hazard to the accomplishment of the Work, the operation of the existing facilities, or nuisance to the surrounding environment.
6. Blast cleaned surfaces shall be cleaned prior to application of specified coatings or paint. No coatings or paint shall be applied over damp or moist surfaces.

C. Specific Surface preparation:

1. See “Part 2 – Products” for specific surface preparation for the project.

3.3 APPLICATION

- A. Coating and paint application shall conform to the requirements of the Steel Structures Painting Council Paint Application Specification SSPC-PA1, latest revision, for "Shop, Field and Maintenance Painting," and the manufacturer of the coating and paint materials.
- B. Paint shall be applied only on thoroughly dry surfaces and during periods of favorable weather, unless otherwise allowed by the paint manufacturer. See Section 1.4, paragraph D for additional information required environmental conditions for coating applications.
- C. Thinning shall be permitted only as recommended by the manufacturer and approved by the OWNER.
- D. Each application of coating or paint shall be applied evenly, free of brush marks, sags, runs, with no evidence of poor workmanship. Care shall be exercised to avoid lapping on glass, hardware, aluminum elements such as guardrails and ladders, fiberglass, or vent screens. See Section 4.2 for schedule of elements to be coated and elements not to be coated. If confusion arises regarding elements to coat, contact the OWNER or Engineer for clarification prior to bid.
- E. Coatings and paints shall be sharply cut to lines. Finished surfaces shall be free from defects or blemishes.
- F. All ingredients in any container of the coating materials shall be thoroughly mixed and shall be agitated often enough during application to keep the pigment suspended. Should thinning be required, the correct thinners must be used for each respective coating used. Minimal amounts will be used and amounts will not exceed the amounts specified by the coating manufacturer. Excessive thinning and creation of too thin materials, which contribute to runs, sags, or drips in the applied coatings will be unacceptable and personnel creating/performing such conditions will not be allowed to continue material preparations or applications.
- G. Application of interior coatings shall be spray applied unless otherwise permitted by the selected manufacturer's product data. Interior coatings shall also be applied in accordance with the manufacturer's recommendations. Exterior coatings are to be spray applied, and in accordance with manufacturer's recommendations. All material shall be evenly applied to form a smooth, continuous, unbroken coating and within the specified coating thickness.
- H. Protective coverings or drop cloths shall be used to protect floors, fixtures, and equipment when required. Care shall be exercised to prevent coatings or paint from being spattered onto surfaces that are not to be coated or painted. Surfaces from which materials cannot be removed satisfactorily shall be recoated or repainted as required to produce a finish satisfactory to the OWNER.

- I. When two coats of paint are specified, where possible, the first coat shall contain sufficient approved color additive to act as an indicator of coverage or the two coats must be of contrasting color.
- J. Dry film thickness per coat shall be within the ranges specified in Section 2.
- K. Provide proper application equipment, including ladders, scaffolding, masking materials, and tools to perform all Work. Ladders and scaffolding shall meet or exceed UL requirements and Metal Ladder Manufacturer's Association
- L. All material shall be applied as specified in these documents and Drawings as well as the manufacturer's product data.
- M. All welds, edges and other irregular surfaces shall receive a stripe coat of the specified product prior to application of the second complete coat.

3.4 COATING SYSTEM INSPECTION AND TESTING

- A. The CONTRACTOR will be expected to routinely verify wet mil thickness as coatings are being applied to guarantee the respective coating thickness is as specified. The final dry mil thickness will also be checked for compliance to this specification.
- B. Surface preparation must be approved by the Engineer, OWNER, and the coating manufacturer prior to any coatings being applied. The required steel/anchor surface profile is to be verified using a properly calibrated DeFelsko PosiTector SPG (or similar surface profile gauge).
- C. After application of each coating in the specified system and its surface has cured, measure its thickness with a properly calibrated DeFelsko PosiTector 200 B or C gauge (or equivalent device) for concrete surfaces or DeFelsko PosiTector 6000 gauge for metallic surfaces to determine, as best possible, the dry mil thickness of each coating. Alternatively, a DeFelsko PosiTest FM magnetic pull-off type gauge (or equivalent conforming to ASTM D7091) may be used to verify dry-film thicknesses on metallic substrates.
- D. Make as many determinations as needed to ensure the specified thickness values in each typical area. Stripe coat corners and sharp edges as required. To all surfaces having less dry film thickness than specified, apply additional coat(s) at no extra cost to the OWNER to bring thickness up to specification.
- E. Painting CONTRACTOR shall permit the OWNER'S representative and/or paint and coating manufacturer (as requested by OWNER) to review Work for conformance to this specification. Engineer and OWNER reserve the right to reject all Work that does not comply with this specification.
- F. The CONTRACTOR shall hire a qualified third-party coatings inspector to perform hold point inspections at the below listed "hold points." Visits shall be made as needed to review

hold points. All hold point inspections are to have a report of findings submitted to the OWNER and Engineer for review. At a minimum, the hold points for inspection shall be:

1. After surface preparation prior to application of first coat or prime coat.
2. After each coat to verify film thickness and an overall visual inspection.
3. After the final coat to verify film thickness and conduct an overall visual inspection.

- G. The OWNER reserves the right to perform tests of any items to ensure compliance of the installed products with the performance requirements of this specification. Tests will be the responsibility of the OWNER under direction of the OWNER'S representative. If tests result in substandard performance of the applied coating, the burden is on the CONTRACTOR to correct any deficiencies encountered to ensure compliance with this specification.

3.5 COLOR SCHEME

- A. Color submittals will be made to the OWNER for approval prior to application. Paint selection at interior locations is to be the selected manufacturer's standard white, beige, or similar. See Section 1.4, paragraph B for additional information on submittals.

3.6 PROTECTION AND CLEAN UP

- A. Upon completion of the Work, all staging, scaffolding, and containers shall be removed from the site or destroyed in a manner approved by the OWNER. Coating or paint spots and oil or stains upon adjacent surfaces shall be removed and the jobsite cleaned. All damage to surfaces resulting from the Work shall be cleaned, repaired, or refinished to the satisfaction of the OWNER at no cost to the OWNER.
- B. It shall be the responsibility of the CONTRACTOR to always protect, in areas where painting is being done, floors, materials of other crafts, equipment, vehicles, fixtures, and finished surfaces adjacent to paint Work. Cover all electric plates, surface hardware, nameplates, gauge glasses, etc., before start of painting Work.
1. Provisions shall be made to contain all debris, blast media, and paint chips generated from the cleaning operations. The CONTRACTOR will be required to protect the ground surface and collect and dispose of all debris generated during the removal of the existing coating as outlined above at no cost to the OWNER.
 2. At the option of the OWNER during this project, the CONTRACTOR will contain all spent abrasives, old paint chips, paint overspray and debris by means suitable to the OWNER, including, but not limited to, full shrouding of the area.
- C. After completion of all painting, the CONTRACTOR shall remove from the job site all painting equipment, surplus materials and debris resulting from the Work.
- D. The CONTRACTOR is responsible for the removal and proper disposal of all materials from the job site in accordance with Local, State and Federal requirements as outlined by the Environmental Protection Agency. Documentation on proper disposal of hazardous materials is to be provided to the OWNER.

- E. After completion of the work the CONTRACTOR shall disinfect the interior wet portions of the tank prior to the OWNER returning it to service as follows:

Disinfection Methods: Sterilization procedures shall conform to the North Carolina Division of Environmental Health requirements NCAC Title 15A, Sub-Chapter 18C, Section .1000, Paragraph .1003 that references ANSI / AWWA Standard C652-11; “Disinfection of Water Storage Facilities”. Where large volume tanks may lack suitable drainage area for the chlorinated water, “Chlorination Method 2” shall be accomplished by applying chlorine solution of concentration not less than 200 ppm directly to the surfaces of all parts of the storage facility which would be in contact with water when the storage facility is full to the overflow elevation. The chlorine shall thoroughly coat all surfaces to be treated including the inlet and outlet piping and shall be applied to drain piping such that it will have available chlorine of not less than 10 ppm when filled with water. The surfaces disinfected shall remain in contact with the chlorine solution for at least 30 minutes after which time any accumulation in the floor of the tank shall be removed. Chlorine concentrated wastewater from disinfection of tanks shall be dechlorinated by the Contractor before being disposed of (See AWWA C-651 Appendix B for neutralizing chemicals). Chlorine concentrated wastewater from disinfection of tanks shall be drained to sanitary sewer where available. Potable water shall be admitted; the drain piping purged of the chlorinated water and the storage facility then filled to its overflow level. All safety precautions shall be observed. Water samples shall be taken by the Contractor and sent to the PWC laboratory for bacteriological testing. Should the sample not be approved, the sterilization procedures shall be repeated and resting done until the water meets North Carolina Division of Environmental Quality standards. All reutilization and retesting will be done at the Contractor's expense.

3.7 WARRANTY AND TOUCH-UPS

- A. The CONTRACTOR will warrant the Work free of defects in workmanship for a period of one year from the acceptance of the Work. Items to be included in the warranty are blistering, peeling, delamination, or any other failure of the specified coating due to error in the application process. At the end of one year, the CONTRACTOR will return for a one-year anniversary inspection of the Work. The CONTRACTOR will correct any deficiencies found at no cost to the OWNER. Inspections shall be conducted to conform to OWNER'S specification. Items excluded from this warranty are as follows:
1. Defects or failures resulting from abuse by the OWNER.
 2. Defects in design involving failure of the structural frame or foundations.
 3. Damage caused by fire, tornado, hail, hurricane, acts of God, wars, riots or civil commotion.
- B. The CONTRACTOR is to obtain from the product manufacturer a warranty of the specified products for a minimum of five (5) years beyond the completion date. The warranty shall ensure that the product, as installed, does not check, crack, excessively chalk, delaminate from the substrate, or allow water to penetrate through the coating for

the period stated above. This warranty is to be conveyed to the OWNER at completion of the job and prior to the project closeout.

- C. Strict adherence to manufacturer's complete touch-up recommendations shall be followed. Any questions relative to compatibility of products shall be brought to the OWNER and manufacturer's attention. Otherwise, CONTRACTOR assumes full responsibility.
- D. The CONTRACTOR shall provide, at the end of the project, at least one (1) gallon of each generic topcoat in each color as specified by the OWNER for future touch-up. Two gallons may be required for two (2) component materials.

PART 4 – SCHEDULE

4.1 PROJECT SCHEDULE

- A. Bidders shall submit a timeline type schedule from date of award showing mobilization, job start, and job completion dates with project milestones included with the bid package that will meet PWC's required project completion time limit – see General Terms and Conditions. Bidders shall specify total number of lost days due to weather that are included on their schedule for the project. Lost days more than this number will be considered for extension of the approved completion date by the same number of days.
- B. Schedule is for Work to begin immediately following award. CONTRACTOR shall commit sufficient resources to the project so that all Work can be completed in a timely manner.

4.2 COATING SCHEDULE

- A. Interior dry “non-immersion” elements to be coated during this project:
 - 1. All interior surfaces unless noted otherwise.
- B. Interior dry “immersion” elements to be coated during this project:
 - 1. All interior dry locations in permanent contact with water and susceptible to condensation to include:
 - i. Underside of tank bowl at interior dry locations.
 - ii. Roof access tube (with exception of the stainless-steel ladder).
 - iii. All exposed areas of the 20”-diameter fill/discharge pipe.
- C. Interior wet elements to be coated during this project:
 - 1. spot repair at the top of the inside tank ladder
 - 2. Spot repair at overflow drain weir box.
 - 3. Spot repair at roof manhole access into wet area of tank.
- D. Exterior elements to be coated during this project:
 - 1. All exterior elements with existing coating.

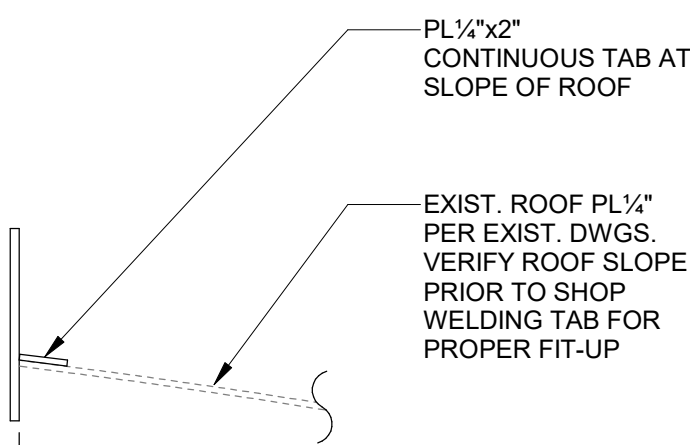
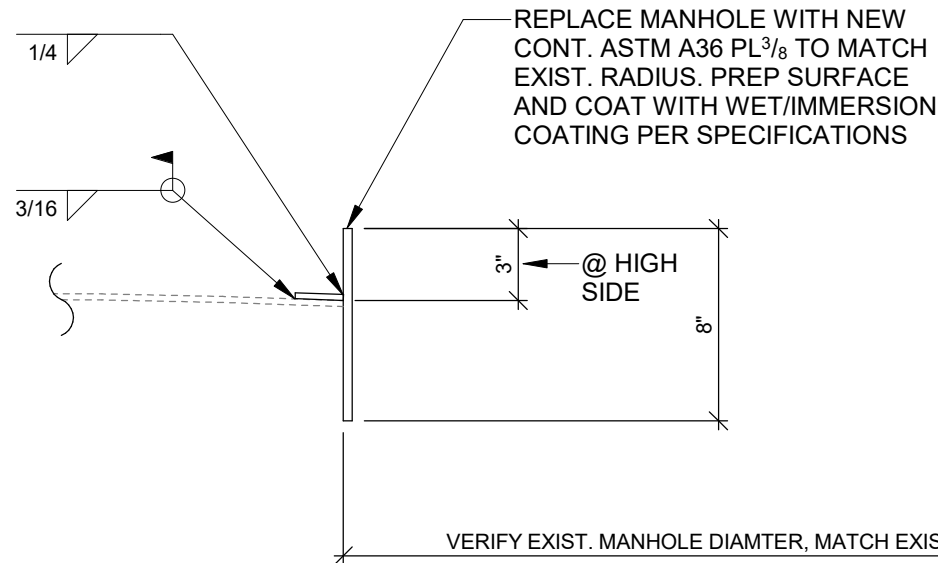
E. Interior / exterior elements to be protected from coating during this project:

1. Stainless steel elements to include the climbing ladder(s).
2. Telecommunications equipment to include coaxial cables, antennas, remote radio units, etc.
3. Galvanized elements including telecommunications corral elements at the top of the roof access tube (drywell).
4. Wire screens and fastening components at roof ventilator and overflow openings.
5. Any labels (such as Underwriter Laboratories and Factory Mutual), gauges, signage, placards, and similar items, unless specifically directed.
6. Interior and exterior pump equipment.
7. Electrical conduit, unless specifically directed.
8. Locks and keyholes.
9. Any moving parts of operating units such as valve and damper operators, sensing devices, motor and fan shafts, etc. unless otherwise noted.
10. Interior concrete floor and foundation unless otherwise noted.

END OF TECHNICAL SPECIFICATION

APPENDICES

- NOTES:
1. GRIND AND REMOVE EXISTING CORRODED MANHOLE VERTICAL PLATE AND REPLACE AS INDICATED.
 2. RE-WELD EXIST. MANHOLE LID (NOT SHOWN) TO NEW VERTICAL PLATE AFTER INSTALLATION.
 3. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 4. EXISTING INFORMATION OBTAINED FROM CALDWELL TANK AS-BUILT DRAWINGS DATED FEBRUARY 20, 1995. VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

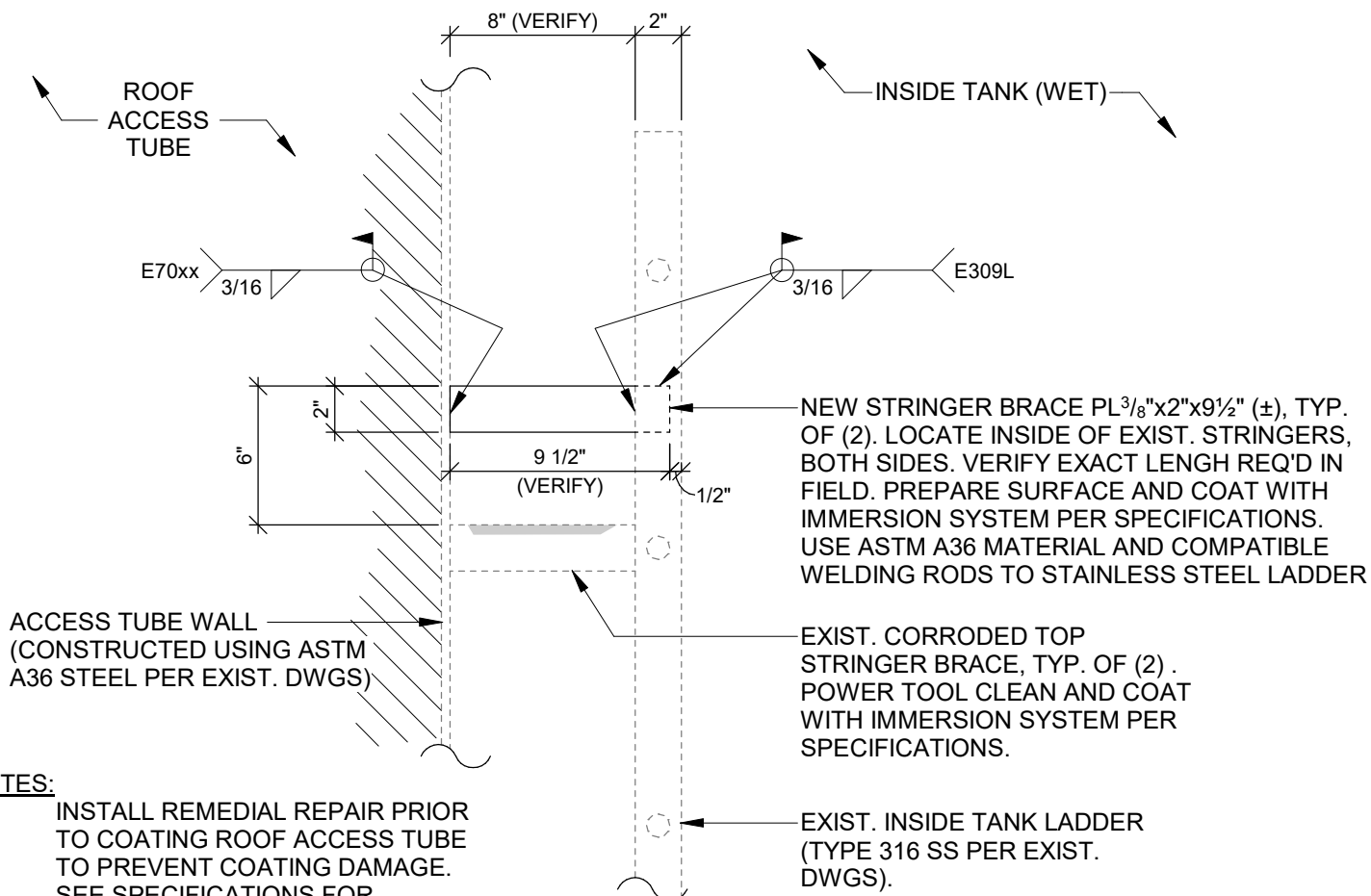


INSIDE TANK (WET)

REMEDIAL REPAIR AT ROOF MANHOLE

1 1/2" = 1'-0"

1
S1



- NOTES:
1. INSTALL REMEDIAL REPAIR PRIOR TO COATING ROOF ACCESS TUBE TO PREVENT COATING DAMAGE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 2. EXISTING INFORMATION OBTAINED FROM CALDWELL TANK AS-BUILT DRAWINGS DATED FEBRUARY 20, 1995. VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

REMEDIAL INSIDE TANK LADDER REPAIR

1 1/2" = 1'-0"

2
S1

FH FLEMING & ASSOCIATES, P.A.
STRUCTURAL ENGINEERING • BUILDING ENCLOSURES
1004 HAY STREET, FAYETTEVILLE, NC 28305

NC License # C-2828
OFFICE 910-433-2825

This drawing and the designs shown are the property of Fleming & Associates, P.A.
The reproduction, copying or other use of this drawing without their written consent
is prohibited and any infringement will be subject to legal action.
© Fleming 2025



04/14/25

PROJECT NAME

CLINTON RD.
WATER TANK

2510 Clinton Road
Fayetteville, NC 28312

SHEET TITLE

REMEDIAL
REPAIR DETAILS

PROJECT TEAM

DESIGNED BY:

JLK

DRAWN BY:

JLK

CHECKED BY:

JLK

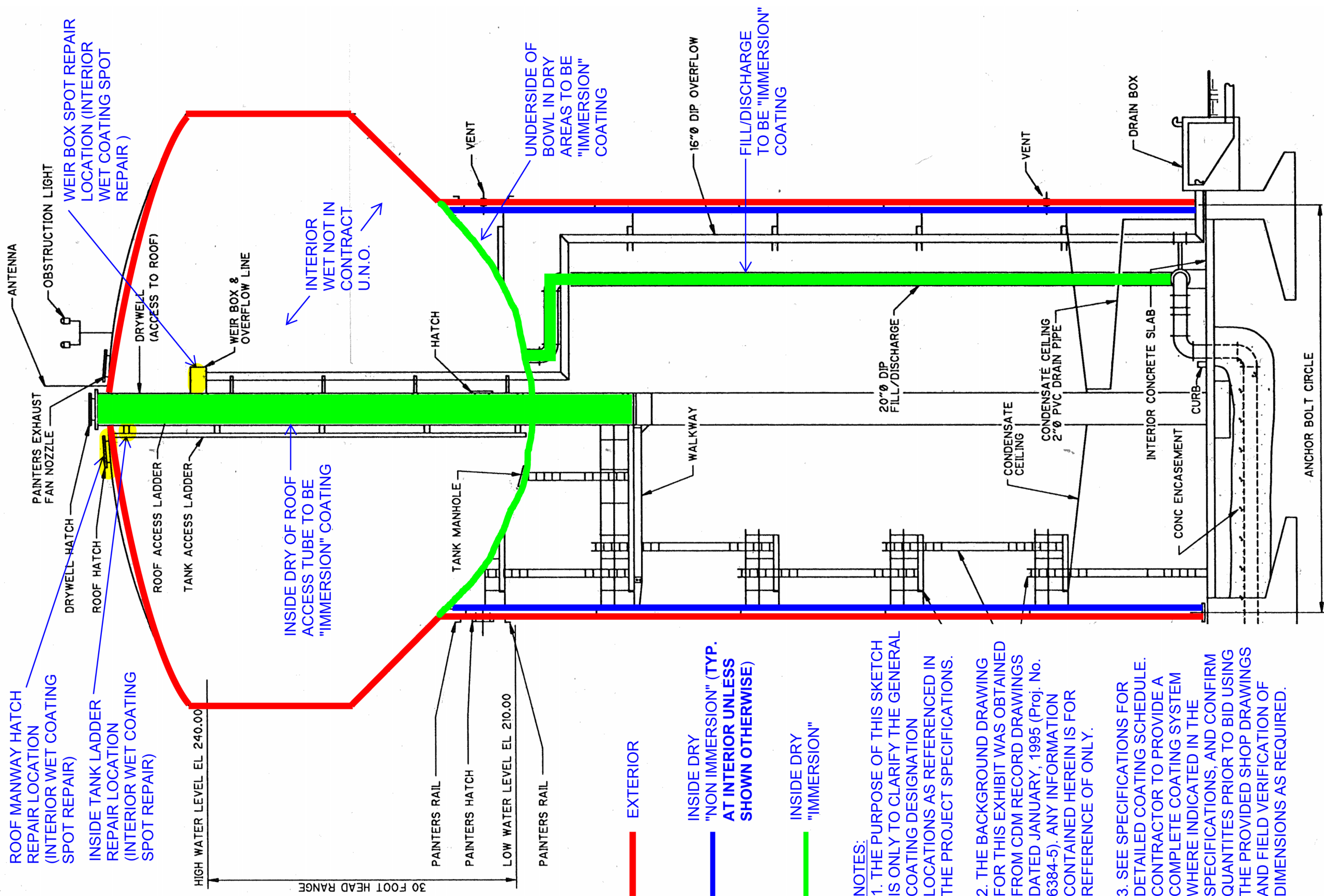
ISSUE DATE

03/27/25

PROJECT NO.

17-158

S1



EXTERIOR

INSIDE DRY
"NON IMMERSION" (TYP.
AT INTERIOR UNLESS
SHOWN OTHERWISE)

INSIDE DRY
"IMMERSION"

NOTES:

1. THE PURPOSE OF THIS SKETCH IS ONLY TO CLARIFY THE GENERAL COATING DESIGNATION LOCATIONS AS REFERENCED IN THE PROJECT SPECIFICATIONS.
2. THE BACKGROUND DRAWING FOR THIS EXHIBIT WAS OBTAINED FROM CDM RECORD DRAWINGS DATED JANUARY, 1995 (Proj. No. 6384-5). ANY INFORMATION CONTAINED HEREIN IS FOR REFERENCE OF ONLY.
3. SEE SPECIFICATIONS FOR DETAILED COATING SCHEDULE. CONTRACTOR TO PROVIDE A COMPLETE COATING SYSTEM WHERE INDICATED IN THE SPECIFICATIONS, AND CONFIRM QUANTITIES PRIOR TO BID USING THE PROVIDED SHOP DRAWINGS AND FIELD VERIFICATION OF DIMENSIONS AS REQUIRED.

SEAL

EXHIBIT FOR
REFERENCE
ONLY

PROJECT NAME

CLINTON RD.
WATER TANK

2510 Clinton Road
Fayetteville, NC 28312

SHEET TITLE

COATING
LOCATIONS
EXHIBIT

PROJECT TEAM

DESIGNED BY:

JLK

DRAWN BY:

JLK

CHECKED BY:

JLK

ISSUE DATE

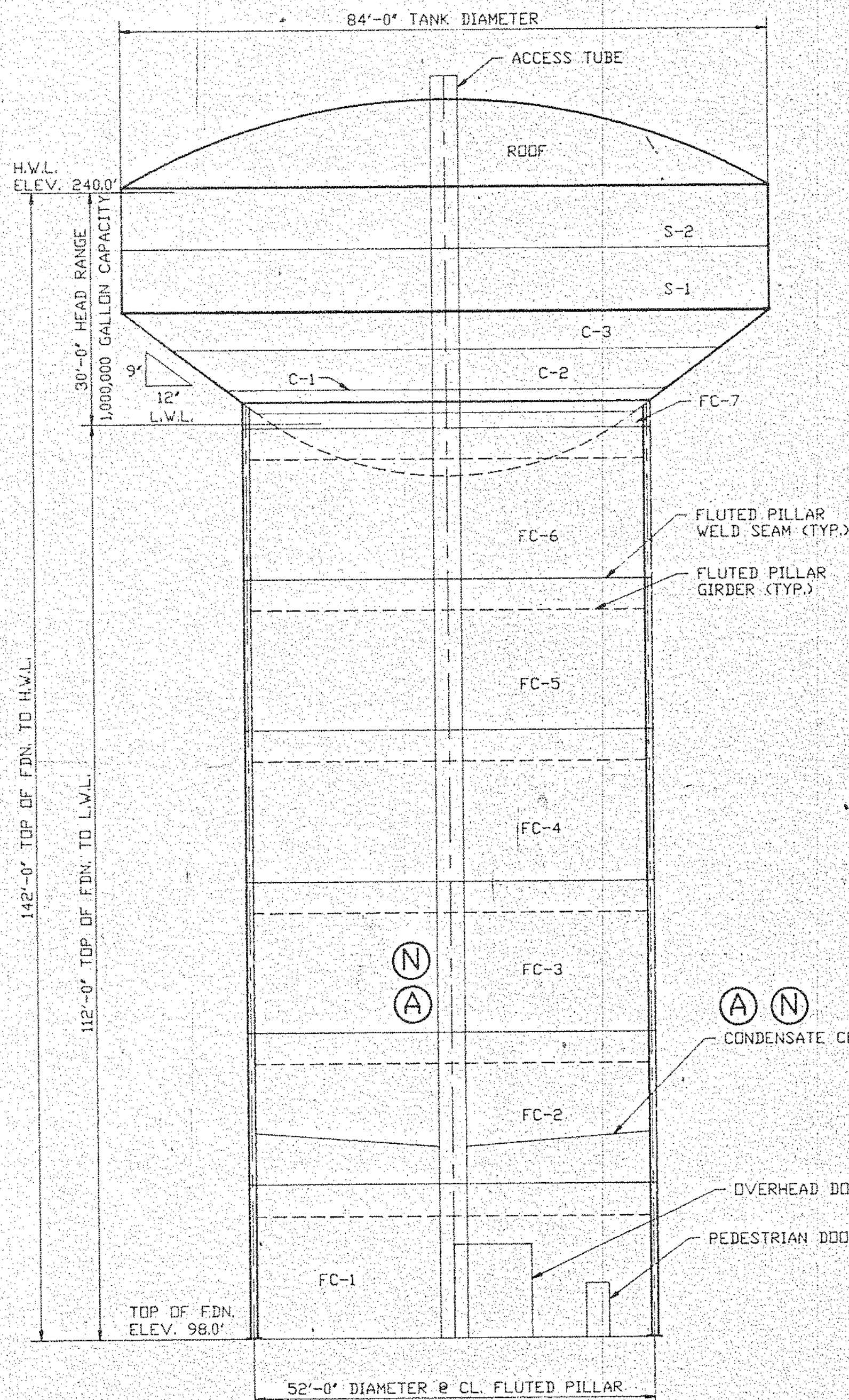
SHEET NUMBER

03/27/25

PROJECT NO.

17-158

S2



MATERIAL THICKNESSES	
ROOF TAIL	1/4"
ROOF CAP	1/4"
ROOF RAFTER	5' X 5' X 3/8" ANGLE
RIM ANGLE	6' X 6' X 3/8"
SHELL: S-2	5/16"
S-1	11/32"
COMPRESSION RING	1/2"
BOTTOM: C-3	13/16"
C-2	1 1/16"
C-1	2"
TAIL	3/8"
SAUCER	3/8"
ACCESS TUBE	42" DIA. X 3/8"
FLUTED PILLAR: FC-7	1/4"
FC-6	9/32"
FC-5	9/32"
FC-4	9/32"
FC-3	9/32"
FC-2	9/32"
FC-1	9/32"
BASE PLATE RING	1 1/2"

DESIGN NOTES:
 TANK AND SUPPORT STRUCTURE DESIGNED, FABRICATED & ERECTED IN ACCORDANCE WITH AWWA D100-84 AND PROJECT SPECIFICATIONS.
 WIND LOAD: 1 PER AWWA + 50% INCREASE
 SNOW LOAD: 25 PSF SEISMIC: ZONE 1 (2.5%)
 (N) 1/16" CORROSION ALLOWANCE ADDED TO MINIMUM THICKNESS OF WETTED SURFACES.
MATERIAL: STEEL PLATE: ASTM A283-GR. C
 STRUCTURAL STEEL SHAPES: ASTM A36
 TANK ERECTOR SHALL GROUT 1" UNDER BASE PLATE RING.
 FOUNDATION, FOUNDATION PIPING, SITE WORK, ELECTRICAL, FIELD PAINTING & STERILIZATION BY C.T.I. SUBCONTRACTORS.

PAINT PROCEDURES:
 MANUFACTURER: TNEC COMPANY, INC.
 NOTE: INTERIOR TANK INCLUDES ALL INTERIOR SURFACES OF WATER CONTAINER OF THE TANK.
 INTERIOR DRY SURFACES INCLUDE ALL INTERIOR SURFACES OF FLUTED COLUMN GIRDERS, ACCESSORIES, UNDERSIDE OF TANK BOTTOM, AND INSIDE OF ACCESS TUBE.
 EXTERIOR TANK INCLUDES ALL EXTERIOR SURFACES OF THE WATER CONTAINER AND FLUTED COLUMN.

SHOP PAINT:
 INTERIOR TANK (WETTED SURFACES): BLAST CLEAN SSPC-SP10 (SURFACE AREA = 18,000 SQ. FT.)
 PAINT PRIME COAT SERIES 20-1255 POTA-PDX (BEIGE)
 TO 3.0-5.0 MILS DFT (DRY FILM THICKNESS)

EXTERIOR AND INTERIOR DRY SURFACES:
 BLAST CLEAN SSPC-SP6 (SURFACE AREA = 67,000 SQ. FT.)
 PAINT ONE PRIME COAT SERIES 20-1255 POTA-PDX (BEIGE)
 TO 2.5 MILS DFT

FIELD PAINT:
 PEDESTRIAN AND OVERHEAD DOORS TO BE PAINTED WITH SAME FINISH COATS AS EXTERIOR AND INTERIOR DRY SURFACES.

INTERIOR TANK (WETTED SURFACES): BLAST CLEAN ALL SEAMS AND ABRADED AREAS SSPC-SP10
 PAINT ONE PATCH COAT SAME AS SHOP.
 PAINT ONE FINISH COAT SERIES 139-AA90 POTA-PDX II (WHITE)
 TO 6.0-8.0 MILS DFT

EXTERIOR SURFACES: BLAST CLEAN ALL SEAMS AND ABRADED AREAS SSPC-SP6
 PAINT ONE PATCH PRIME COAT SAME AS SHOP PRIME.
 PAINT ONE INTERMEDIATE COAT SERIES 69 HI-BUILD EPOXOLINE II TO 2.0-3.0 MILS DFT (TINT FOR CONTRAST)
 PAINT ONE FINISH COAT SERIES 75-AA72 "TEARDROP"
 HI-BUILD EPOXOLINE II TO 2.0-3.0 MILS DFT

TOTAL INTERIOR WET TANK SYSTEM = 9.0-13.0 MILS MIN. DFT
 TOTAL DRY SYSTEM = 8.5-10.5 MILS MIN. DFT

TOTAL EXTERIOR AND INTERIOR DRY TANK SYSTEM = 6.0-9.0 MILS DFT

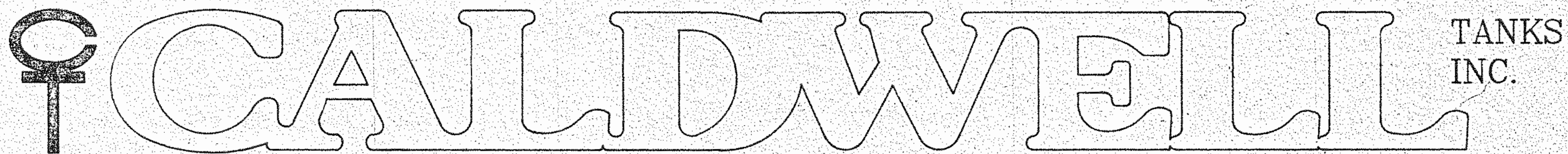
STERILIZE TANK AND COLLECT WATER SAMPLES PER AWWA C652-86 AND THE PROJECT SPECIFICATIONS.
 PAINT LOGG ON TWO (2) SIDES OF TANK

PWC PUBLIC WORKS COMMISSION
 OF THE CITY OF FAYETTEVILLE, NC
 CLINTON RD. 1,000,000 GALLON TANK SITE
 AS BUILT
 DRAWN BY: DATE: 2-20-95
 CHECKED BY: SCALE: AS SHOWN
 APPROVED BY: 4 CW-10512

REV.	BY	DATE	REMARKS
C	RPM	1-26	AS NOTED.
B	RPM	10-7	FINAL COLOR.
A	RPM	5-28	AS NOTED. JEL
Caldwell Tanks, Inc. Louisville, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	DATE:	TITLE: 1,000,000 GALLON FLUTED COLUMN ELEVATION & PAINT DETAILS
DATE:	1-25-93	DRAWING NO.:	E-3510 01

Caldwell Tanks hereby certifies that it has reviewed, checked and approved this shop drawing and it is in conformance with the requirements of the contract documents.
 Date: _____ By: _____

AS BUILT DRAWING



FAYETTEVILLE, NORTH CAROLINA

E-3510

DRAWING INDEX

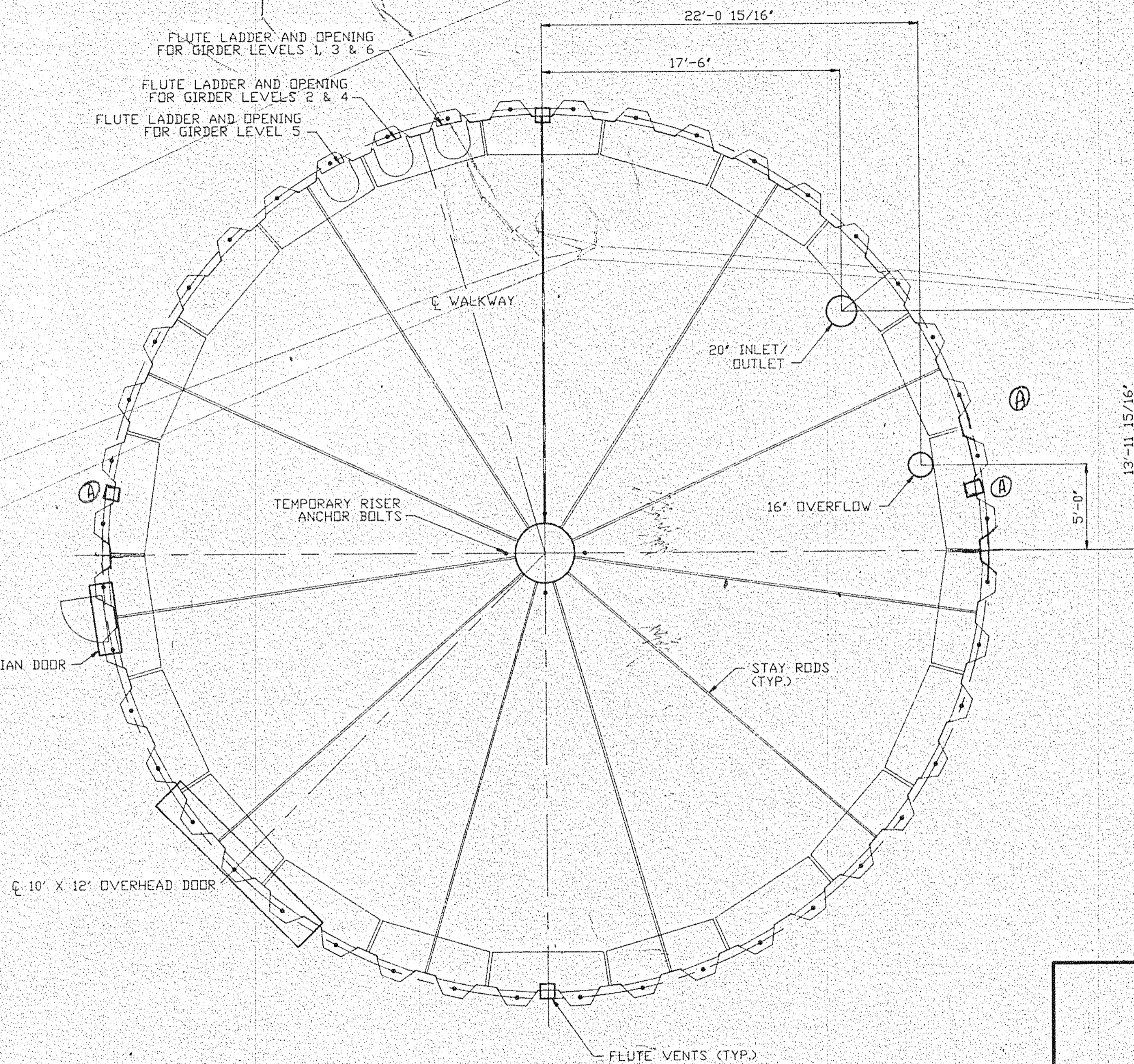
DWG. #	DESCRIPTION
01	ELEVATION & PAINT
02	ORIENTATION (BELOW TANK BOTTOM)
03	ROOF ORIENTATION
04	FLUTE ASSEMBLY DETAILS
05	TANK ASSEMBLY DETAILS
06	TANK BOTTOM DETAILS
07	TANK CONE 'C-1' DETAILS
08	TANK CONES & COMPRESSION RING
09	SHELL & ROOF DETAILS
10	RISER/ACCESS TUBE DETAILS
11	ACCESS TUBE DETAILS
12	GIRDER DETAILS
13	GIRDER RAILING
14	WALKWAY DETAILS
15	EXTERIOR RINGS & STAY RODS
16	LADDER ELEVATION
17	LADDER DETAILS
18	PEDESTRIAN DOOR FRAME
19	INLET PIPING DETAILS
20	OVERFLOW PIPING DETAILS
21	CONDENSATE CEILING DETAILS
21-A	CONDENSATE CEILING DETAILS (A)
22	ROOF COMPRESSION RING
23	ROOF ASSEMBLY
24	OVERHEAD DOOR FRAME DETAILS
25	OVERHEAD DOOR PIECE DETAILS
26	CEILING HATCH & FLUTE VENT DETAILS (A)
27	NAMEPLATE & CONDENSATE CLG. DRAIN DETAILS
28	VENT (A)
29	PRESSURE GAUGE & PIPE SLEEVE (A)
SD	TANK LOGO (A)

STANDARD ACCESSORY ASSEMBLIES

DWG. LOCATION	SUB-ASSY NO.	QTY	DESCRIPTION	P.C. WT.
16	A8-MP-24	1	24" DIA. ACCESS HATCH	138#
03, 11	A6-M1-24	1	24" DIA. MANHOLE ON 42" A.T. ROOF	160#
03	B2-MR-30	2	30" DIAMETER ROOF MANHOLE	106#
(A)				
03	C4-30-01	1	OBSTRUCTION LIGHT BRACKET	15#
03	C5-AS-01	1	ANTENNA SUPPORT ASSEMBLY	8.5#

(A) RPM 6-1 AS NOTED.

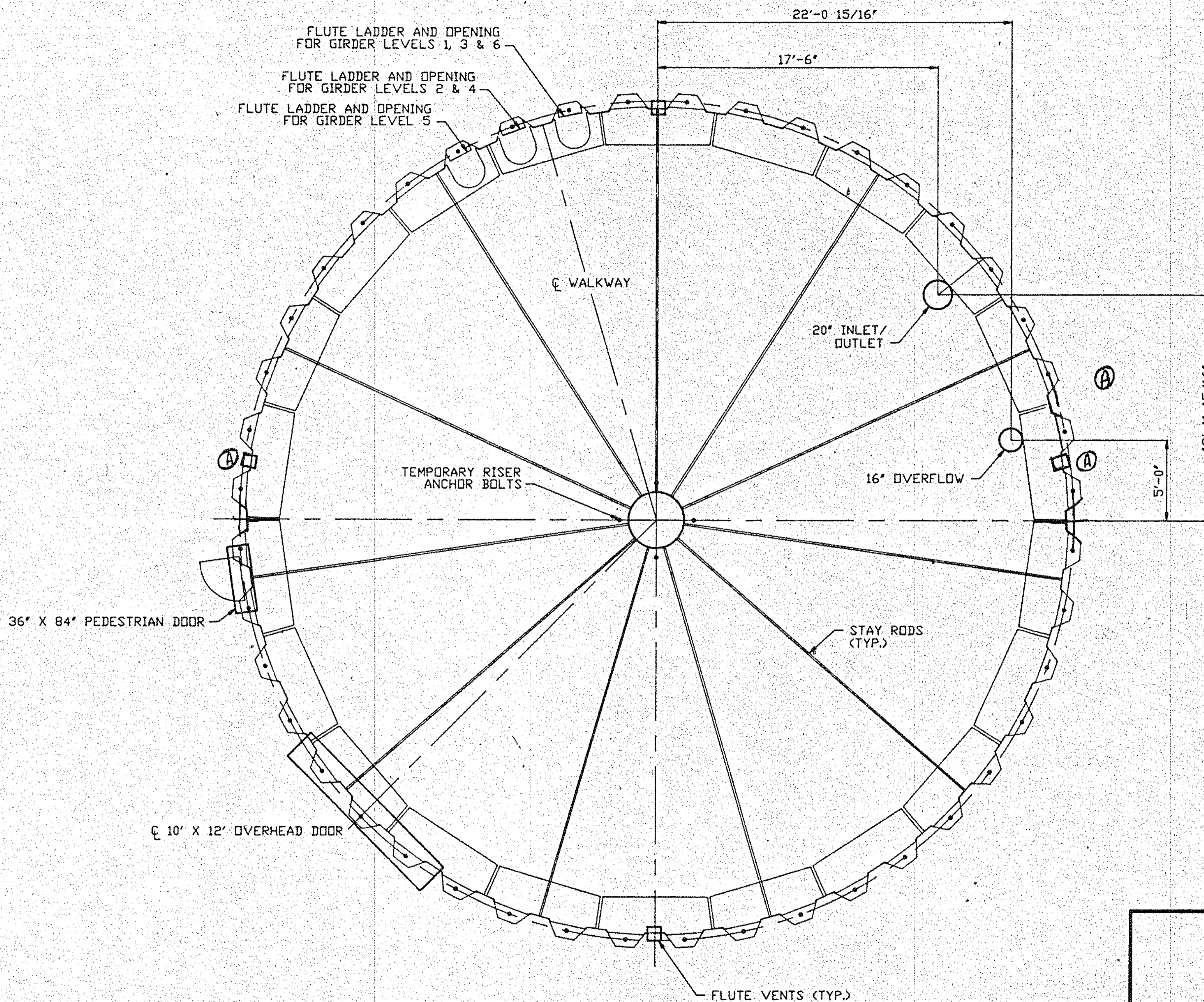
AS BUILT DRAWING



D-13500-002-A

REV.	BY	DATE	REMARKS
A	RPM	5-24-93	AS NOTED
Caldwell Tanks, Inc.			
Louisville, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY	RPM	DATE	TITLE
DATE	2-9-93	DRAWING NO.	E-3510
			ORIENTATION (BASE OF TANK)
			02

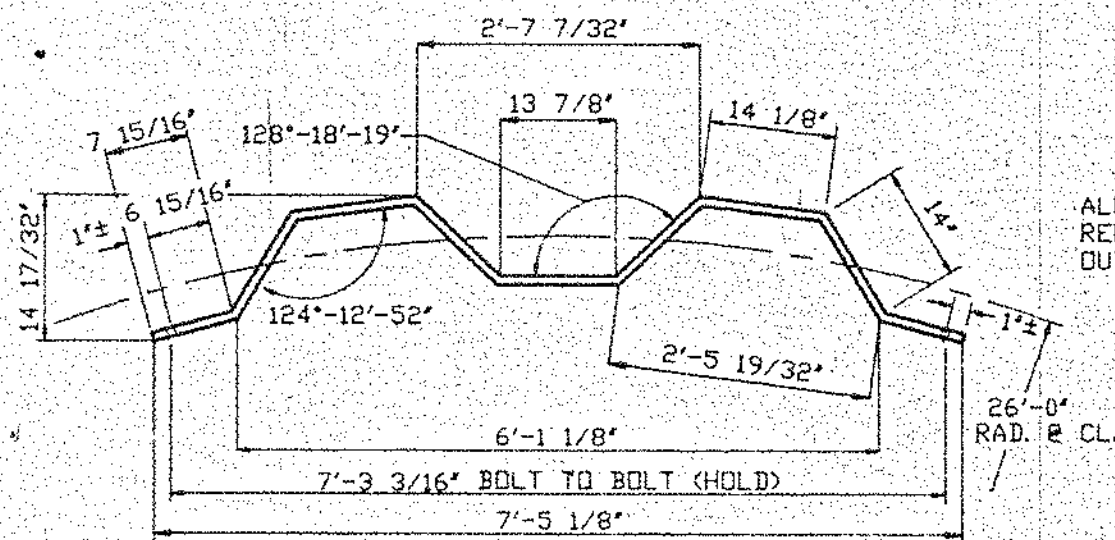
AS BUILT DRAWING



D-13500-002-A

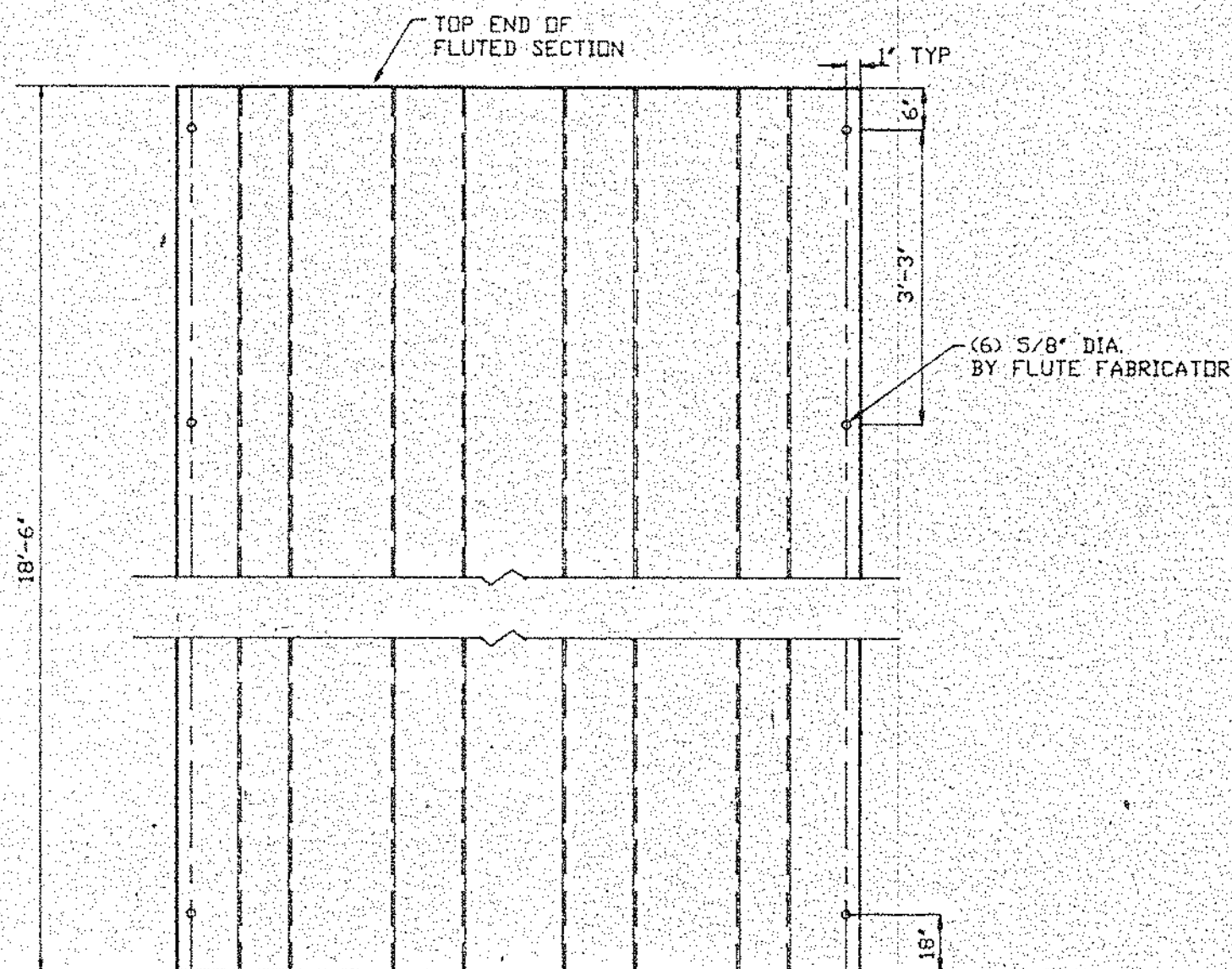
REV.	BY	DATE	REMARKS
A	RPM	5-24	AS NOTED
Caldwell Tanks, Inc.			
Louisville, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	DATE:	TITLE:
DATE:	2-9-93	DRAWING NO.:	E-3510
			02

AS BUILT DRAWING

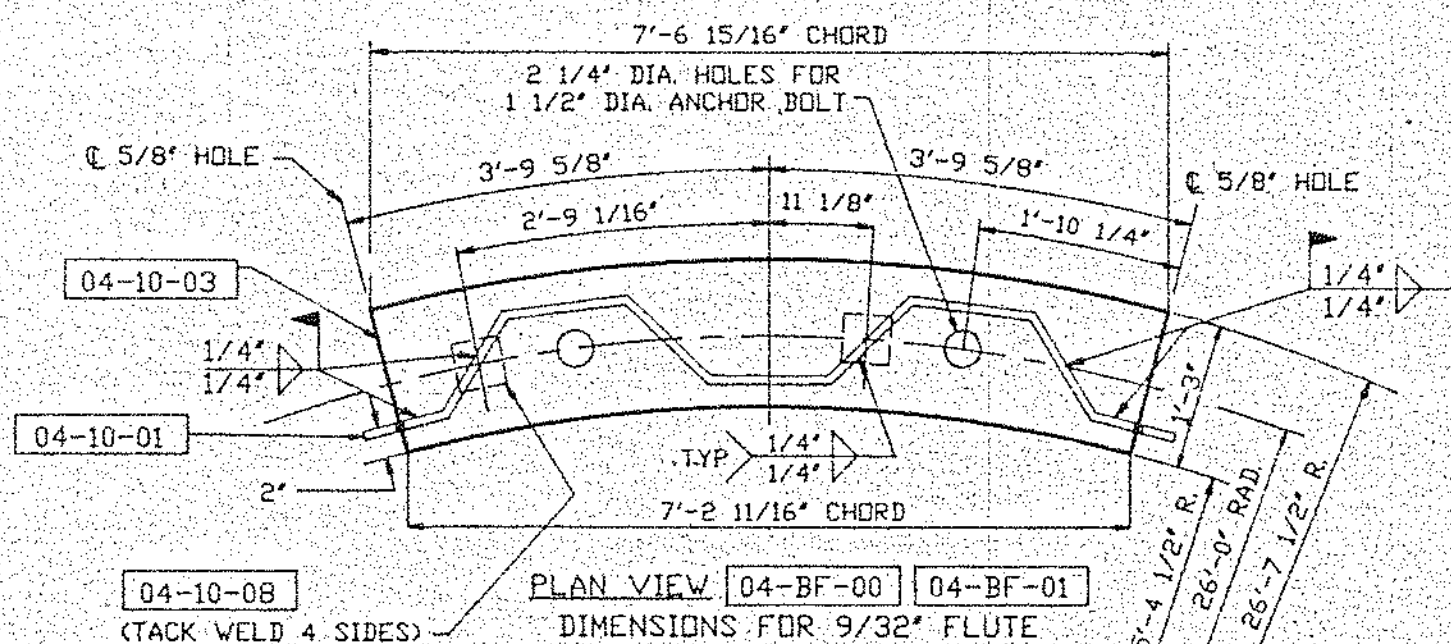


PLAN VIEW

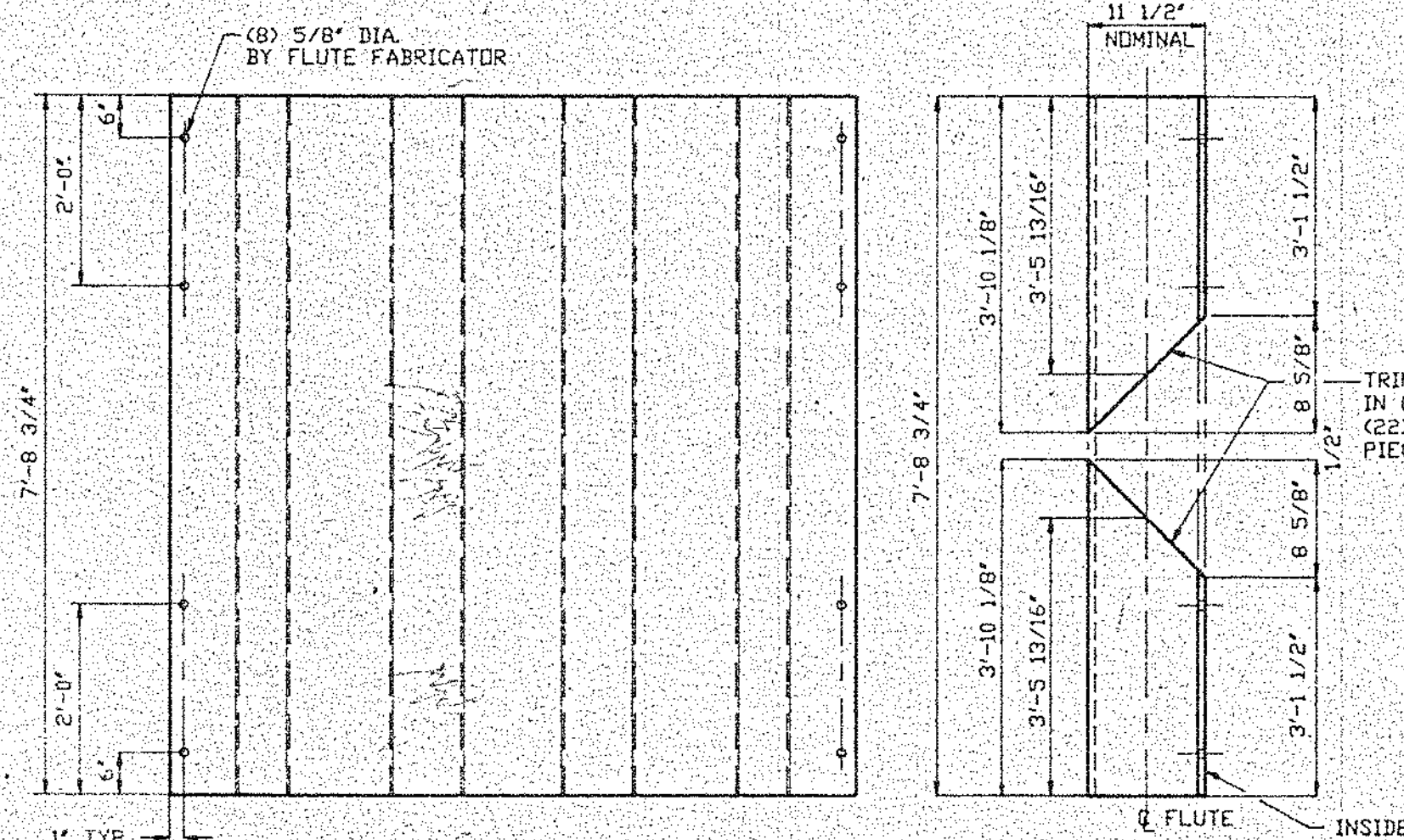
CHORD ACROSS (2) TWO FLUTES = 14'-4 5/8"
BOLT TO BOLT



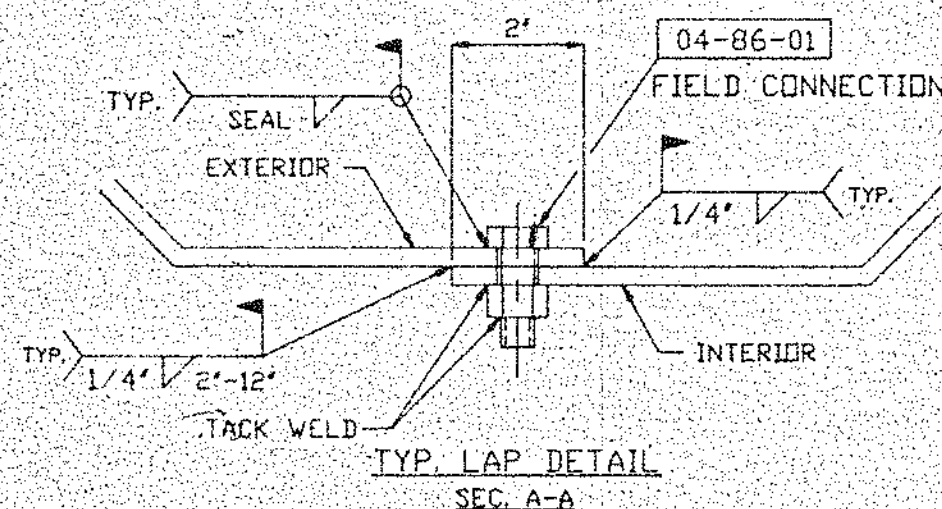
ELEVATION 04-10-01



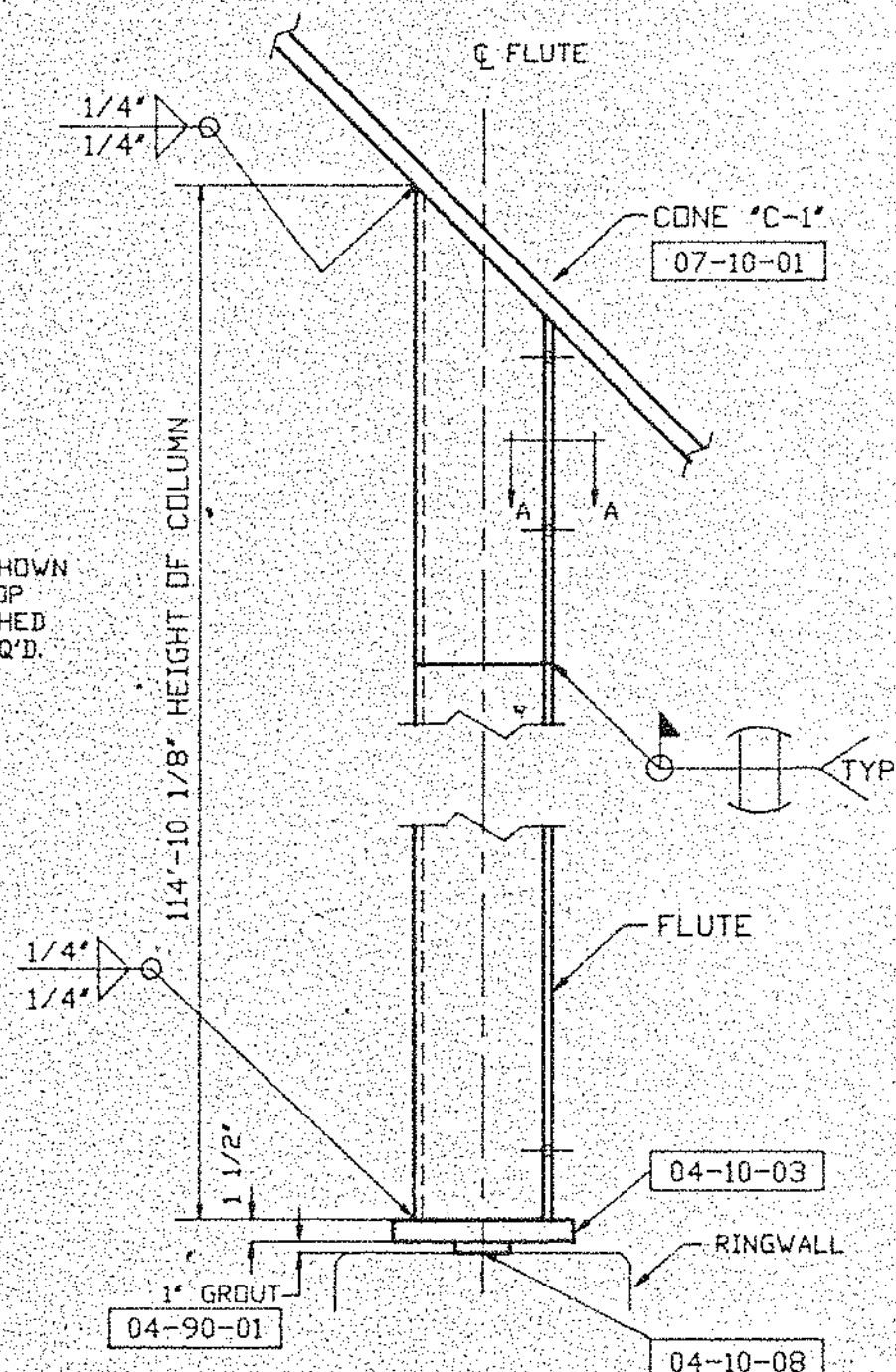
PLAN VIEW 04-BF-00 04-BF-01
DIMENSIONS FOR 9/32" FLUTE



FLUTE "FC-7" 04-10-04
SEE DWG. 07 FOR FLUTE TO CONE ASSEMBLY.



NOTE: LEAVE 52" SECTION OF FLUTE UNWELDED TO BASE PLATE FOR PEDESTRIAN DOOR. REFERENCE DWGS. 02 & 18 FOR ORIENTATION AND DOOR DETAILS.



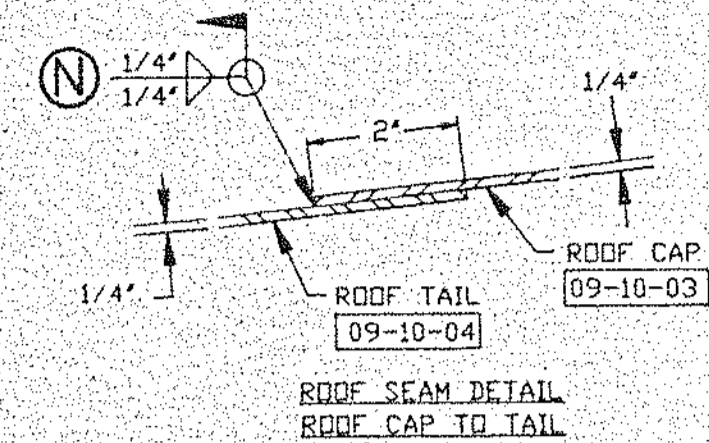
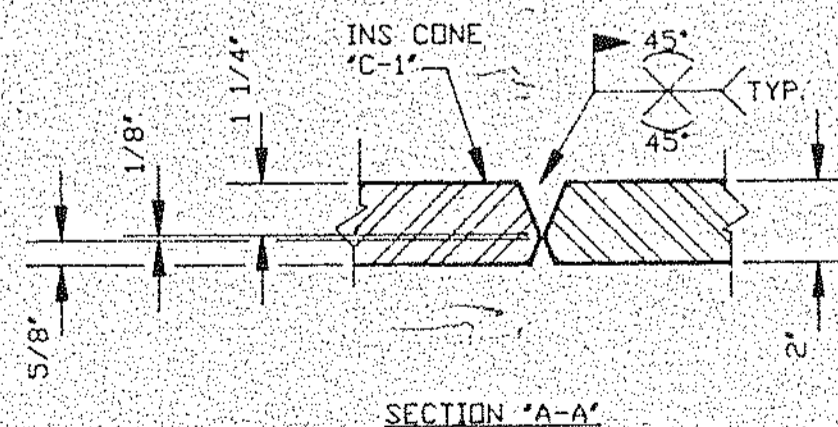
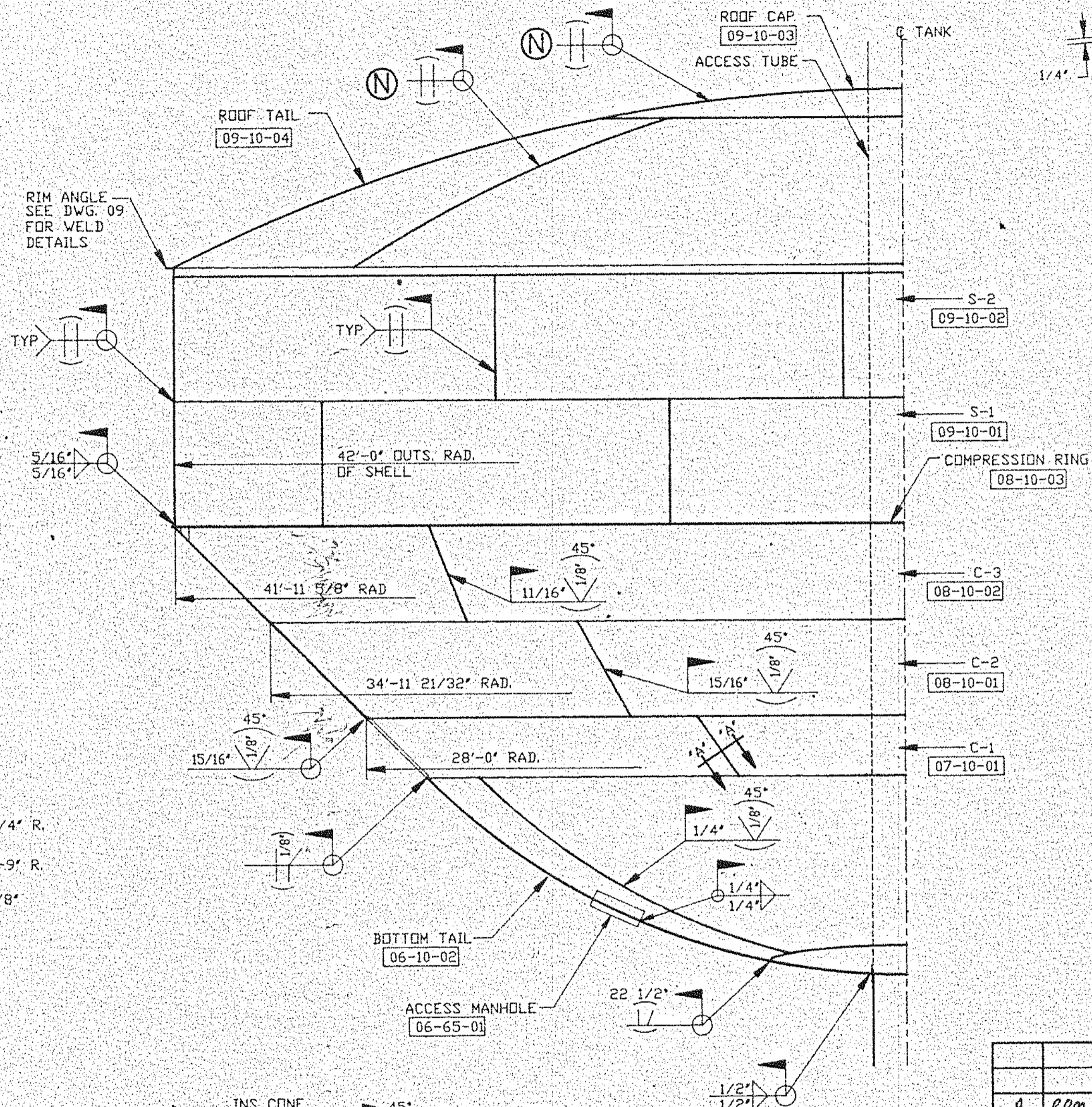
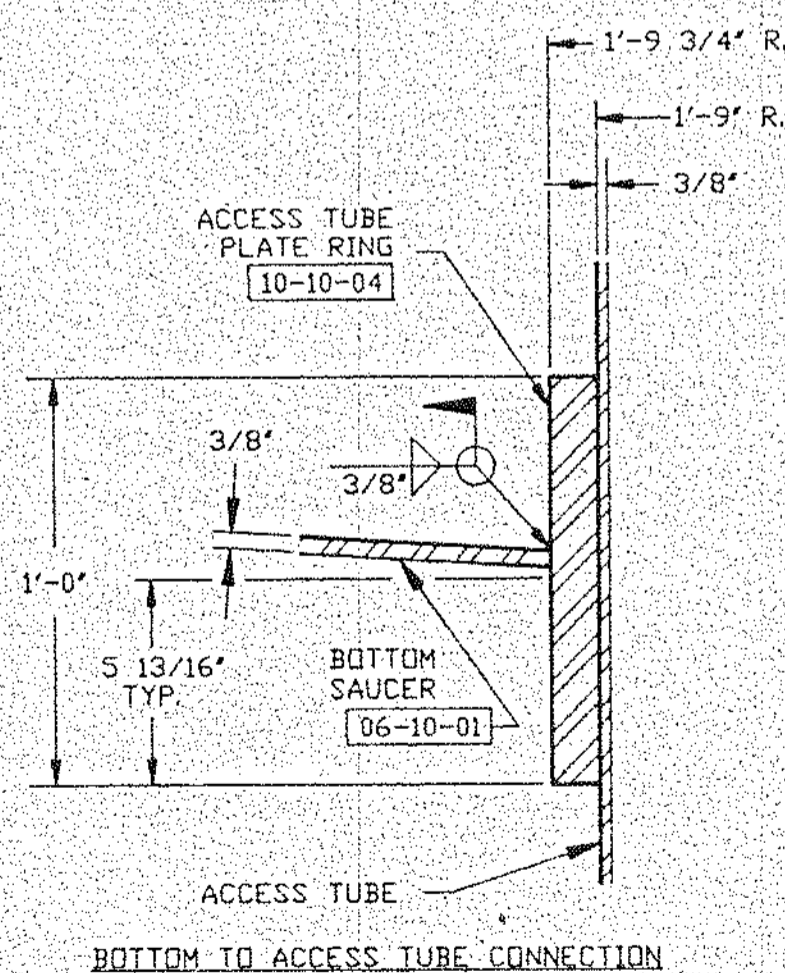
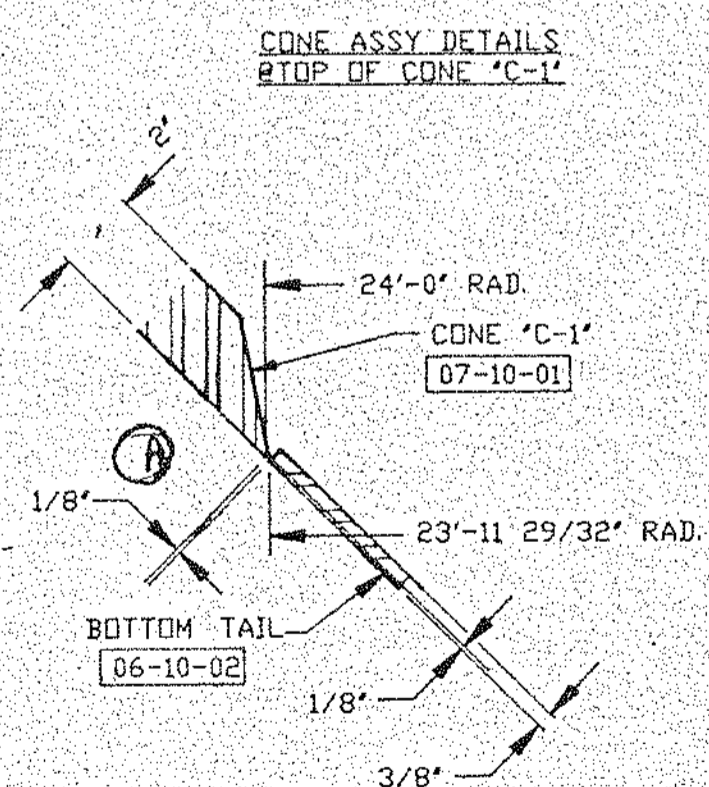
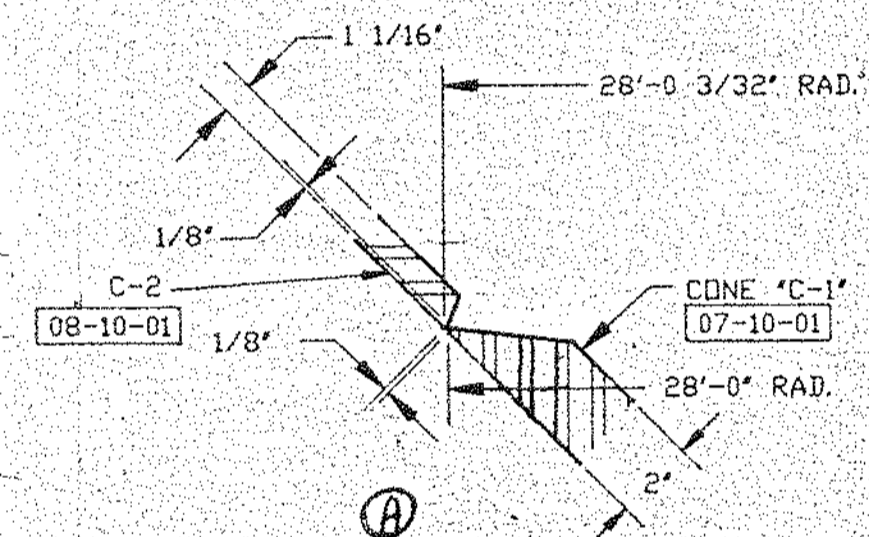
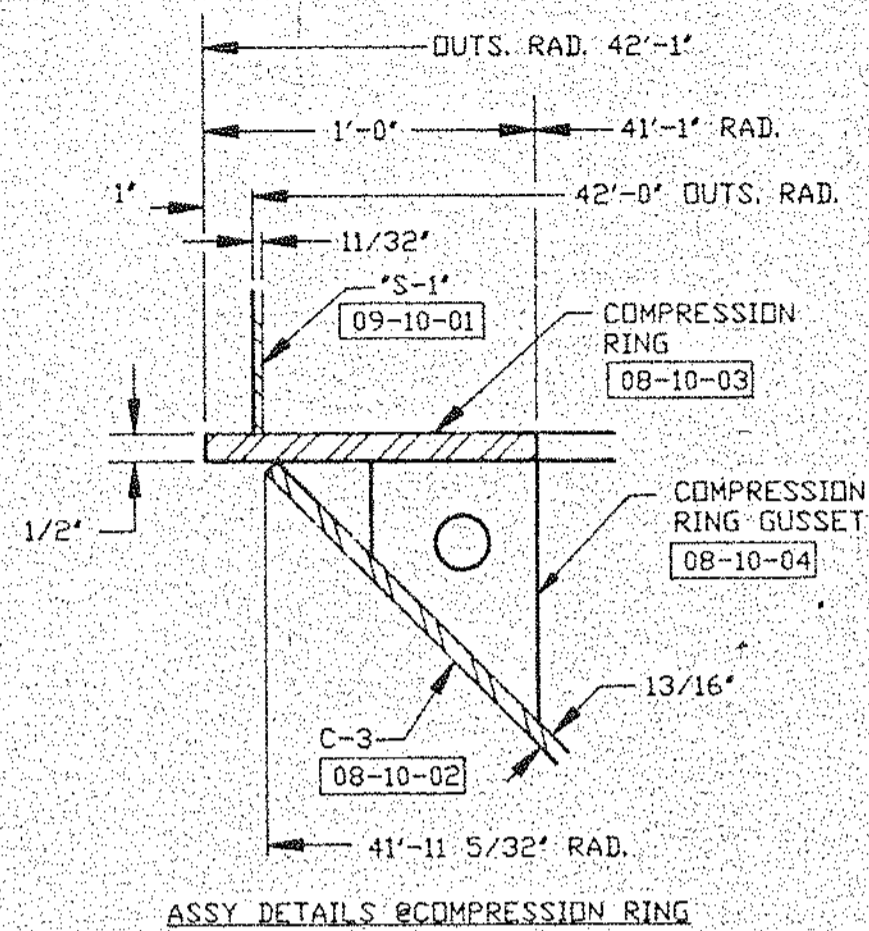
FLUTED COLUMN TO BASE PLATE DETAIL

D-13500-004-A

A RPM 5-28 AS NOTED. JR			
REV.	BY:	DATE	REMARKS
CALDWELL TANKS, INC. LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM JR	TITLE:	FLUTE & BASE PLATE DETAIL
DATE:	2-8-93	DRAWING NO.:	E-3510 04

BILL OF MATERIAL					
SUB ASS'Y NO.	PART NO.	QTY	DESCRIPTION	MATERIAL REQ'D.	PC WT TOT WT
04-BF-00		21	BASE FLUTE W/ BASE PLATE		2655
	04-10-01	1	FLUTE "FC-1"	(PER ASSY) (22) PL. 116" X 9/32" X 224"	2075
	04-10-03	1	BASE PLATE SEGMENT W/ BOLT HOLES	(PER ASSY) 1 1/2" PL.	570
	04-10-08	2	GROUT SHIM	(PER ASSY) 6"x 1"x 6" PL. (STOCK PART)	10
04-BF-01		1	BASE FLUTE ASSY W/ BASE PLATE		3804
	04-10-01	1	FLUTE "FC-1"	(PER ASSY) USE DROP FROM 04-10-01	2075
	04-10-03	1	BASE PLATE SEGMENT W/ BOLT HOLES	(PER ASSY) USE DROP FROM 04-10-03	570
	04-10-08	2	GROUT SHIM	(PER ASSY) 6"x 1"x 6" PL. (STOCK PART)	10
	18-DA-01	1	PEDESTRIAN DOOR REINFORCEMENT FRAME	SEE DWG. 18	1139
04-CF-01		22	CONE FLUTE ASSY		3420
	04-10-04	1	FLUTE "FC-7"	(PER ASSY) (11) PL. 116" X 1/4" X 95"	390
	07-10-01	1	CONE "C-1"	(PER ASSY) SEE DWG. 07	3030
ITEMS LISTED BELOW SHIP LOOSE					
	04-10-02	110	FLUTES "FC-2", "FC-3", "FC-4", "FC-5" & "FC-6"	(110) PL. 116" X 9/32" X 224"	2075 228,250
	04-86-01	475	MACHINE BOLT & NUT	1/2" DIA. X 1 1/2" LG.	
	04-86-02	44	WASHERS (FOR ANCHOR BOLT)	3 1/2" DIA. WASHER FOR 1 1/2" BOLT	
	04-90-01	42	BAGS NON-SHRINK GROUT		50 2100

AS BUILT DRAWING

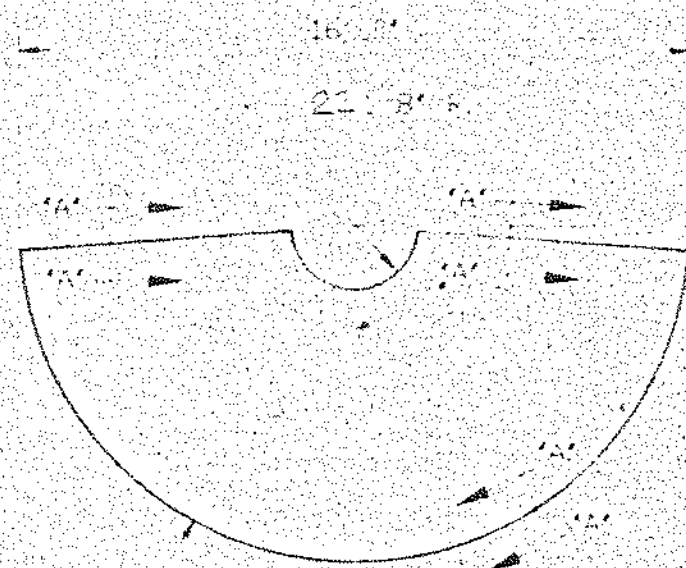


D-13500-005-A

REV.	BY	DATE	REMARKS
A	RPM	6-3	AS NOTED.
CALDWELL TANKS, INC.			
LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY	RPM	per	TITLE
DATE	2-16-93		TANK ASSEMBLY DETAILS
		DRAWING NO.	E-3510
			05

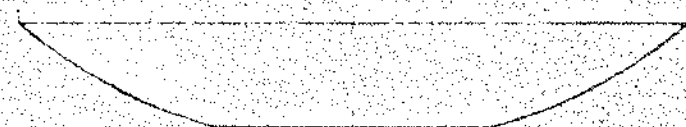
Caldwell Tanks has reviewed this drawing and approved this as-built drawing for use in compliance with the requirements of the contract.

AS BUILT DRAWING

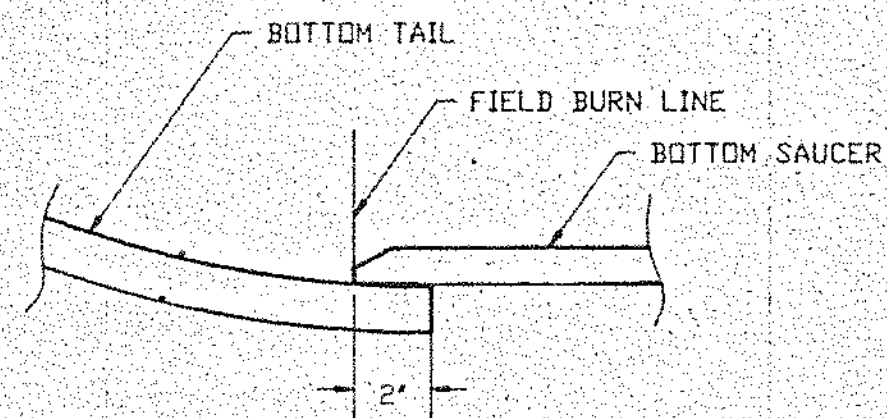
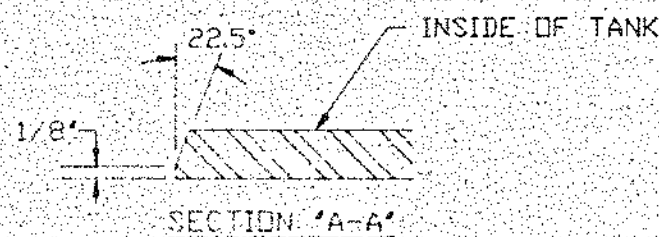


DISH NO. 34'-11 3/8"
INSIDE RADIUS
BEVELS 1/8" INCH

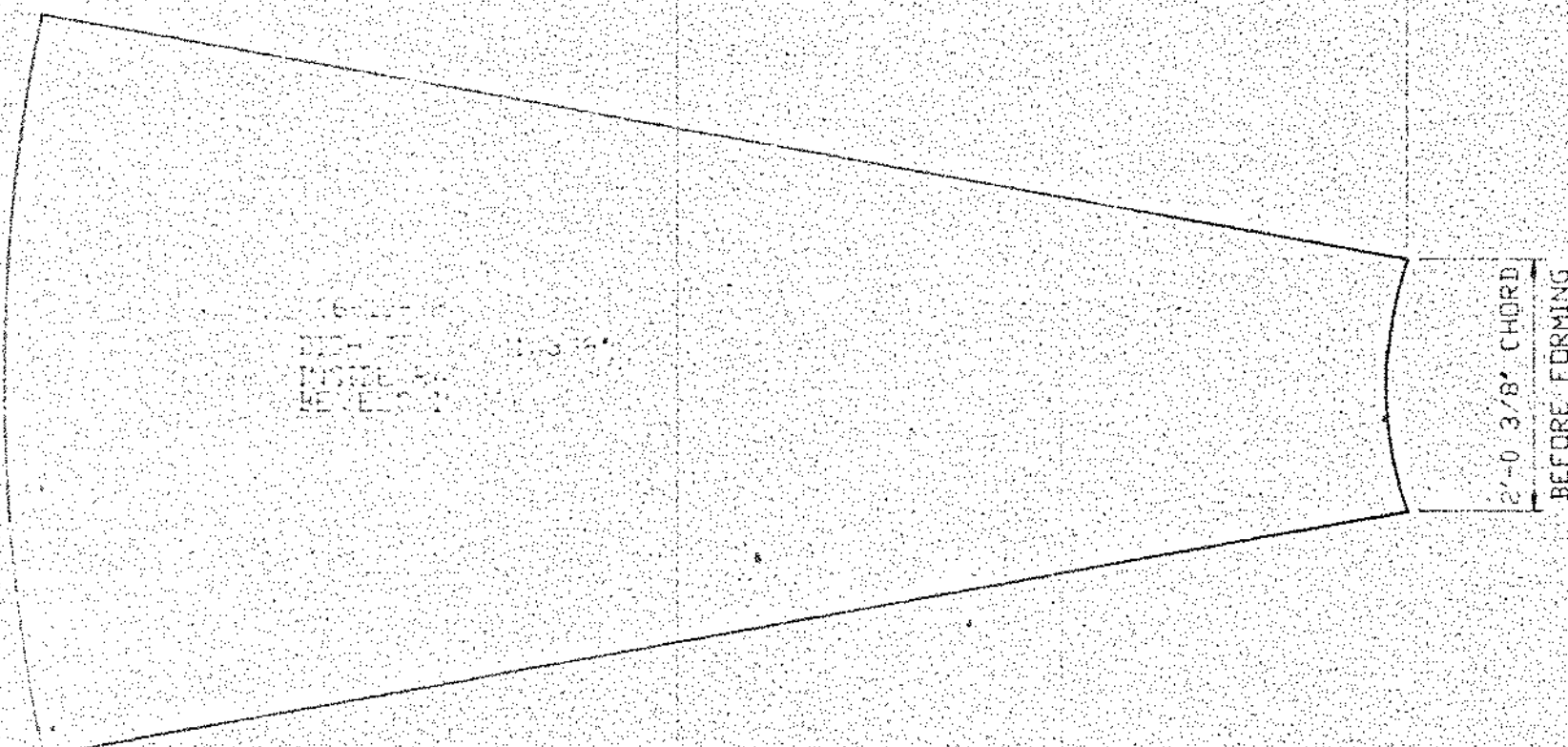
15'-11 5/16"
CHORD AFTER FORMING



BOTTOM SAUCER
06-10-01



TAIL TO SAUCER DETAIL



2'-0 3/8" CHORD
BEFORE FORMING

NOTE:

ALL PIECE EDGES TO BE UNBEVELED
UNLESS OTHERWISE INDICATED.

BILL OF MATERIAL						
SUB-ASSY NO	PART NO	QTY	DESCRIPTION	MAT'L REQ'D.	PC. WT.	TOTAL WT.
ITEMS LISTED BELOW ARE SHIPPED LOOSE						
	06-10-01	2	BOTTOM SAUCER	3/8" PL.	1540	3080
	06-10-02	24	BOTTOM TAIL	3/8" PL.	1150	27,600
	06-65-01	1	MANHOLE NECK	18" X 24" ELLIPTICAL		
	06-65-02	1	COVER W/ HARDWARE	FOR 18" X 24" MANHOLE		
	06-65-03	1	GASKET	FOR 18" X 24" MANHOLE		

(N) 1/16" CORROSION ALLOWANCE

NOTES:

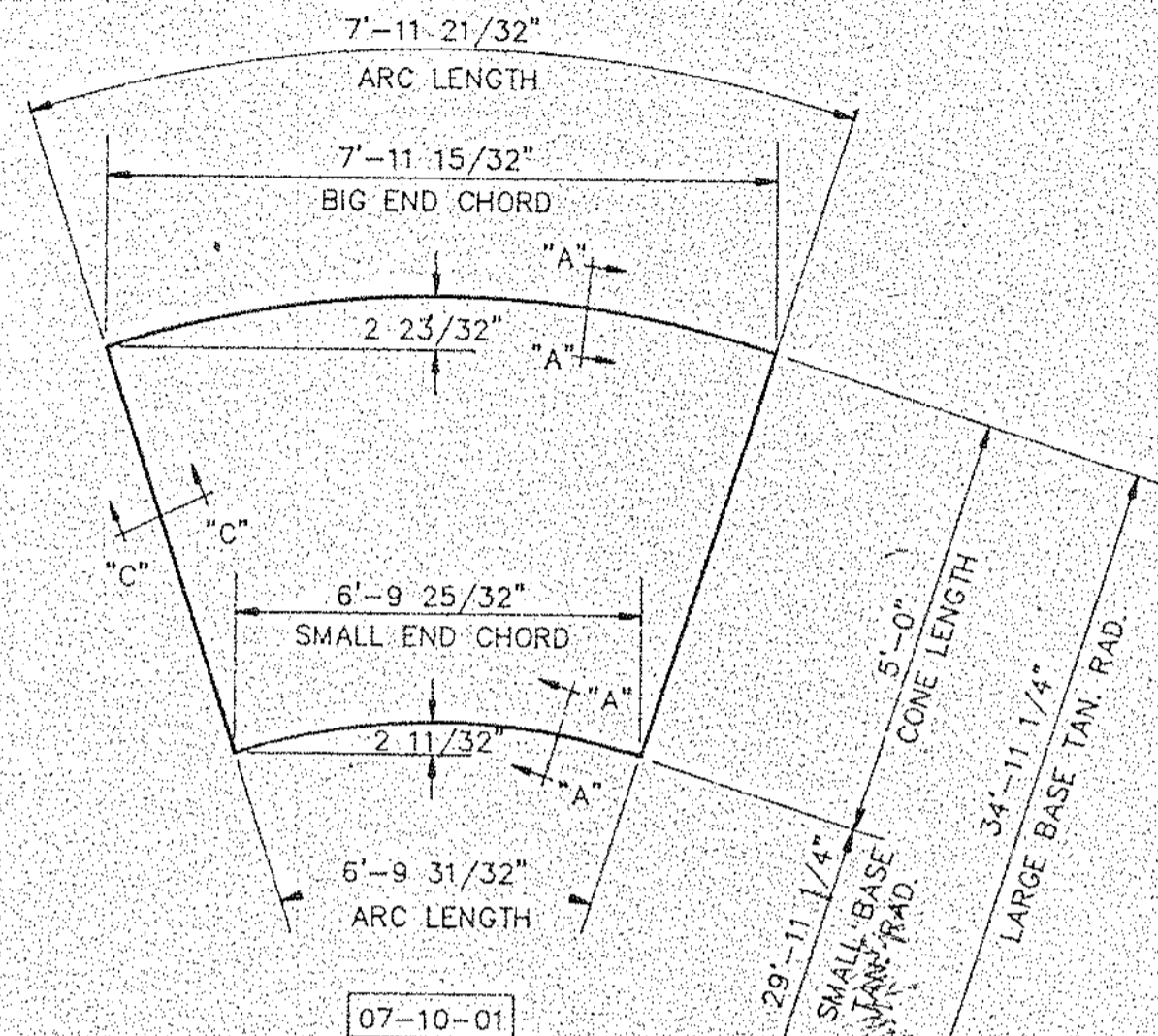
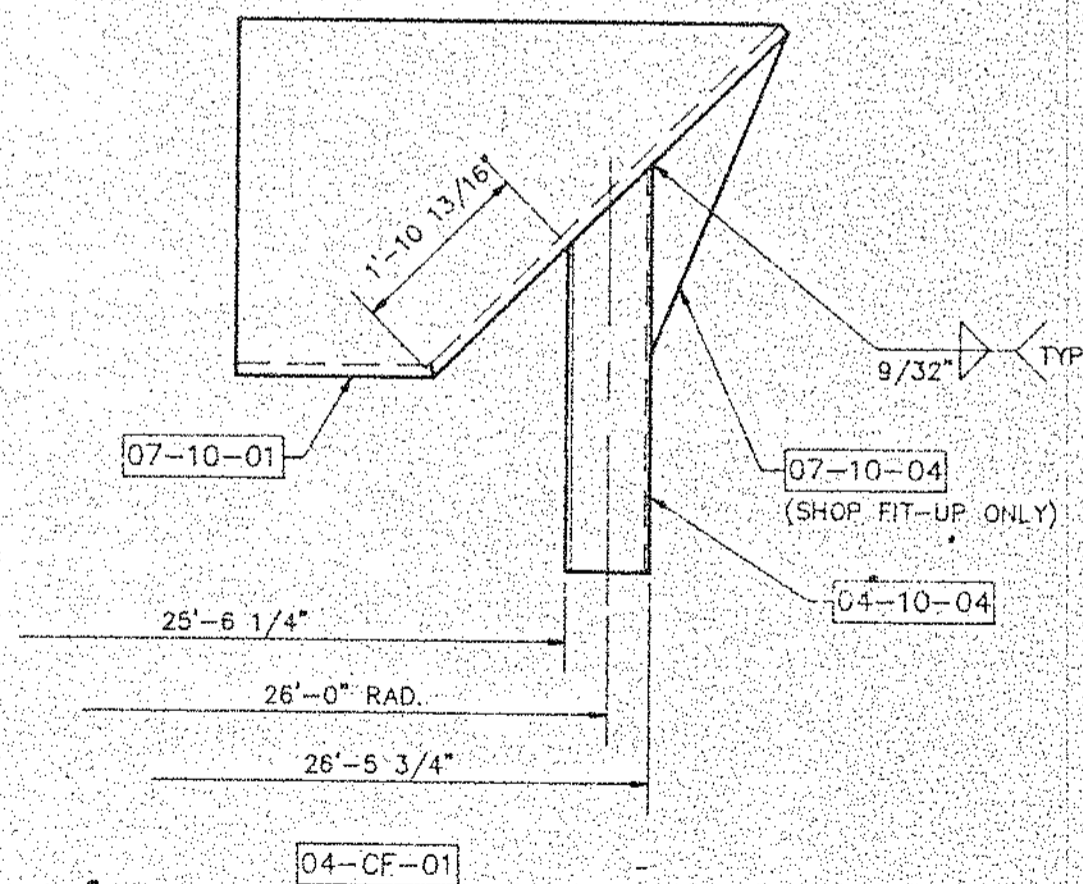
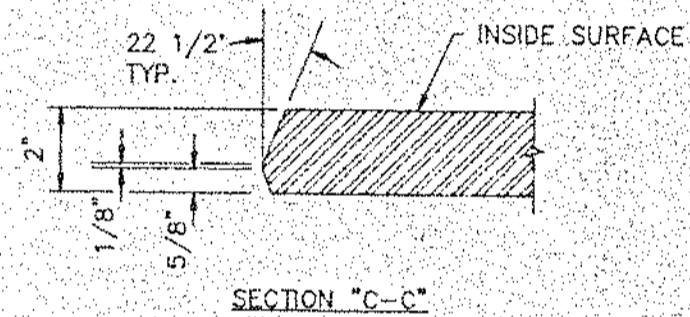
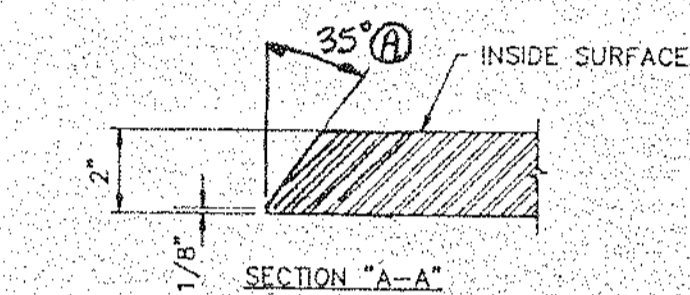
- SEE DWG. E-3510 03 FOR ORIENTATION OF MANHOLE.
- SEE DWG. E-3510 05 FOR WELDING DETAILS & ASSEMBLY OF MANHOLE.

D-13500-006-A

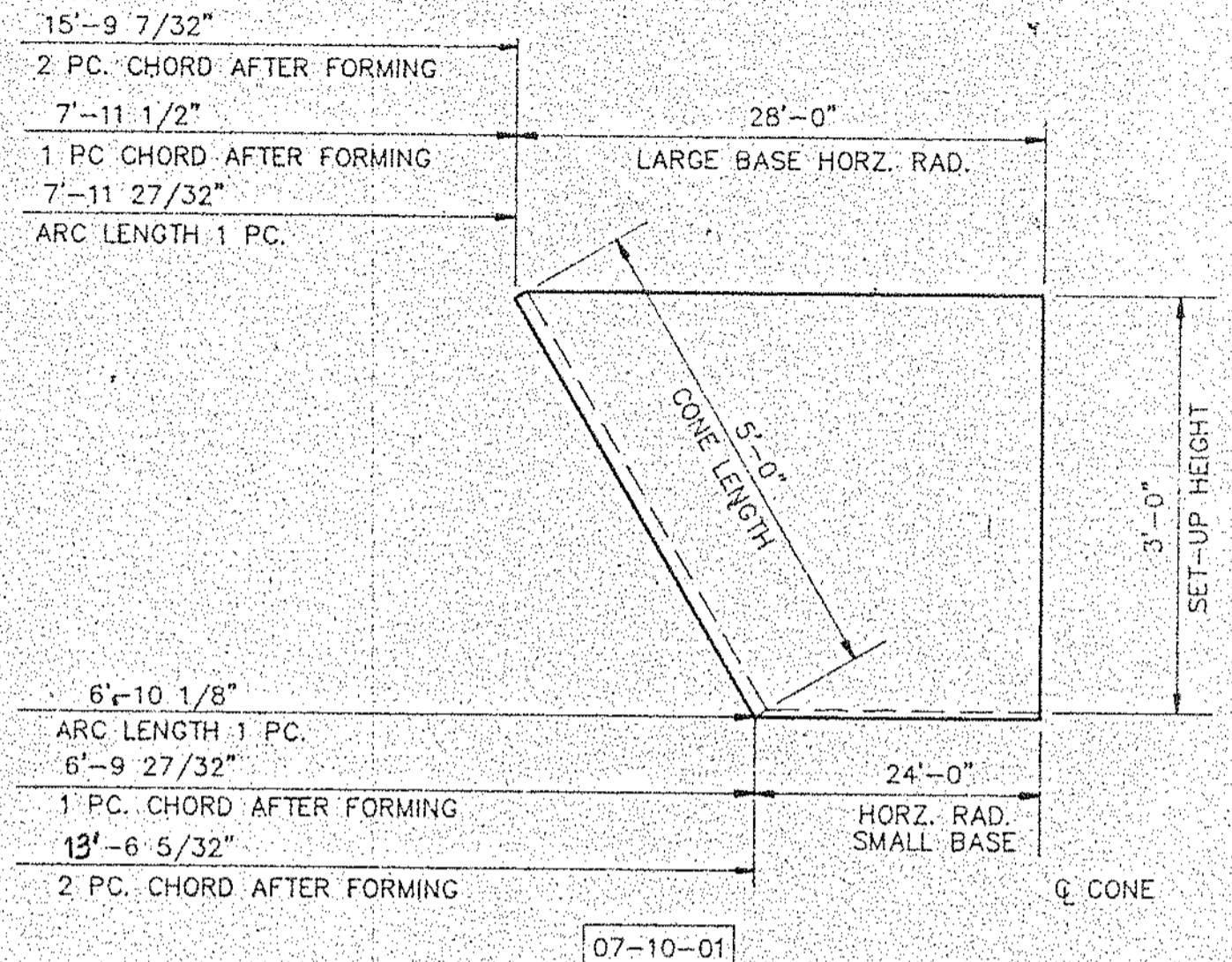
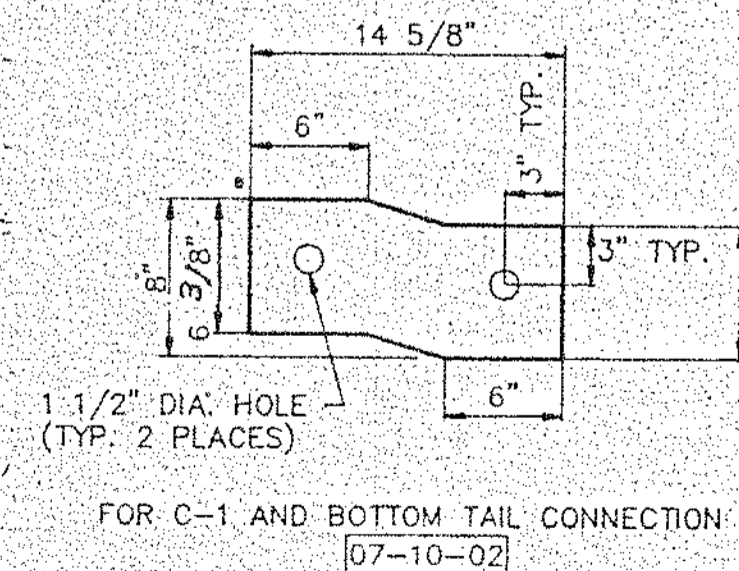
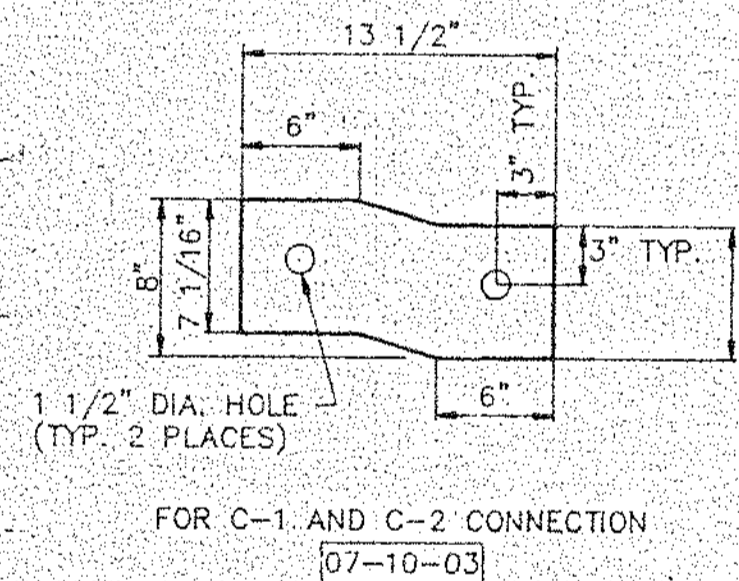
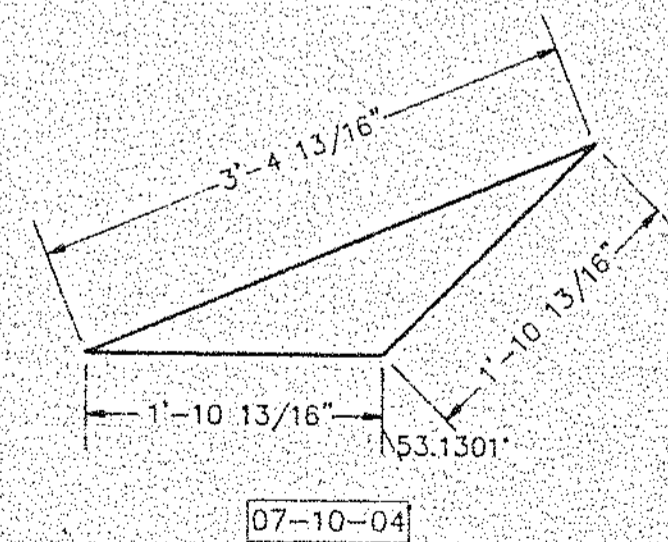
REV.	BY:	DATE	REMARKS
CALDWELL TANKS, INC. LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY: RPM	DATE: 2-16-93	TITLE: TANK BOTTOM DETAILS	DRAWING NO: E-3510 06

AS BUILT DRAWING

BILL OF MATERIAL						
SUB-ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	PC. WT.	TOTAL WT.
ITEMS LISTED BELOW ARE SHIPPED SEPARATELY						
	07-10-01	22	CONE "C-1" (SHIP W/ 04-CF-01)	2" PL.	3030	66,660
	07-10-02	44	Z-BAR ("C-1" TO TAIL CONNECTION)	1/2" PL.		
	07-10-03	44	Z-BAR ("C-1" TO "C-2" CONNECTION)	3/4" PL.		
	07-10-04	22	FIT-UP PLATE	1/4" PL. (FOR SHOP USE ONLY - DO NOT SHIP)		



CONE C1 PIECE DIMENSIONS BEFORE FORMING
 PLATE THICKNESS - 2"
 ALL DIMENSIONS ON CENTERLINE OF PLATE
 22 SEGMENTS REQUIRED (3030 # PER SEGMENT)
 PIECE DIMENSIONS ALLOW FOR 1/8" WELD GAP

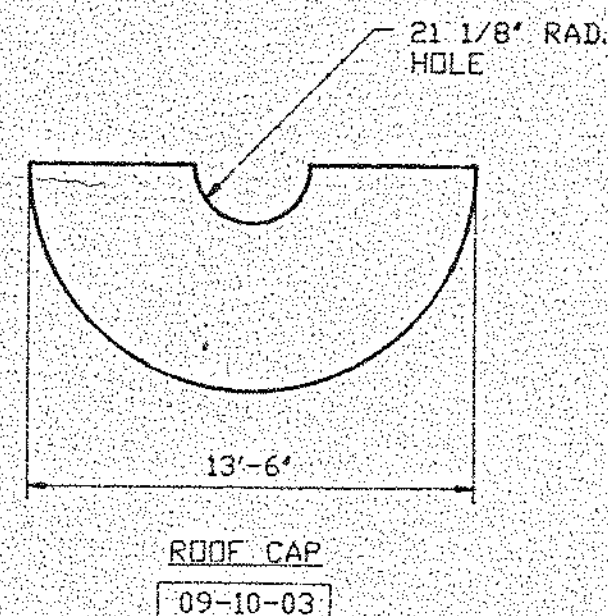
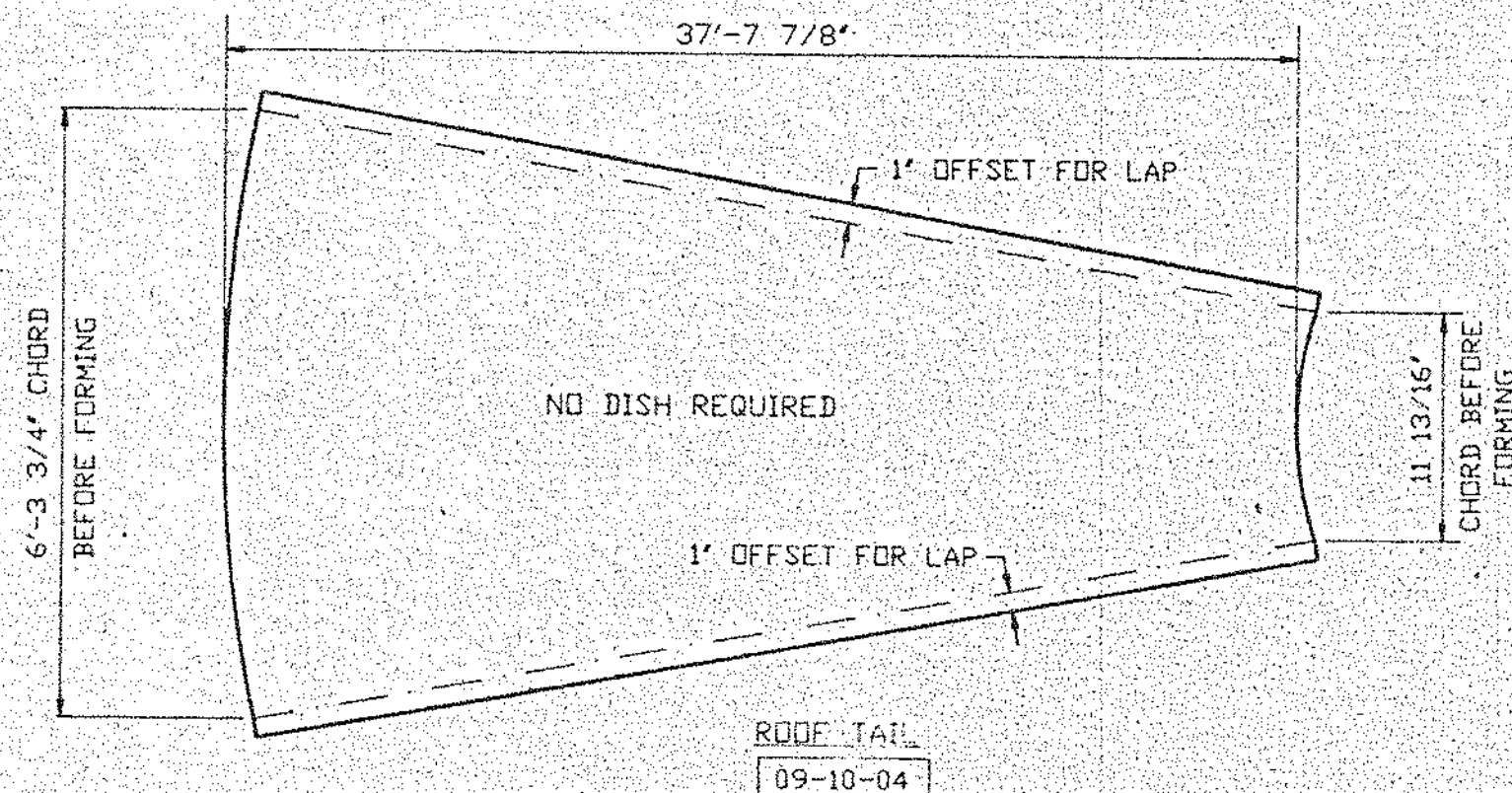


CONE C1 DIMENSIONS AFTER FORMING
 ALL DIMENSIONS ON CENTERLINE OF PLATE
 SHIP IN 22 PCS. (1 CONE SEGMENT & 1 FLUTE SEGMENT)
 SHPG. WT. - 3420 # EA. PC.

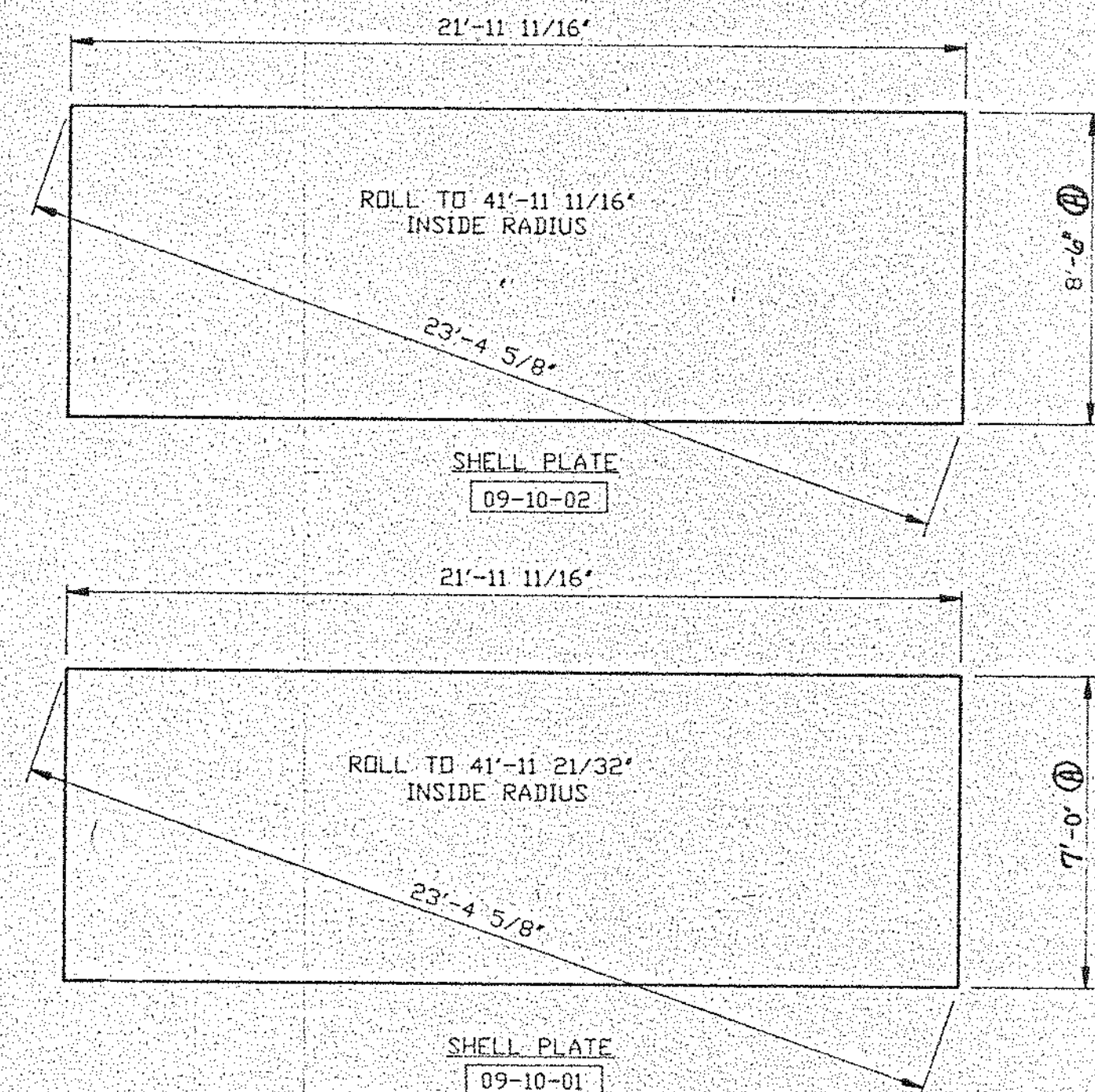
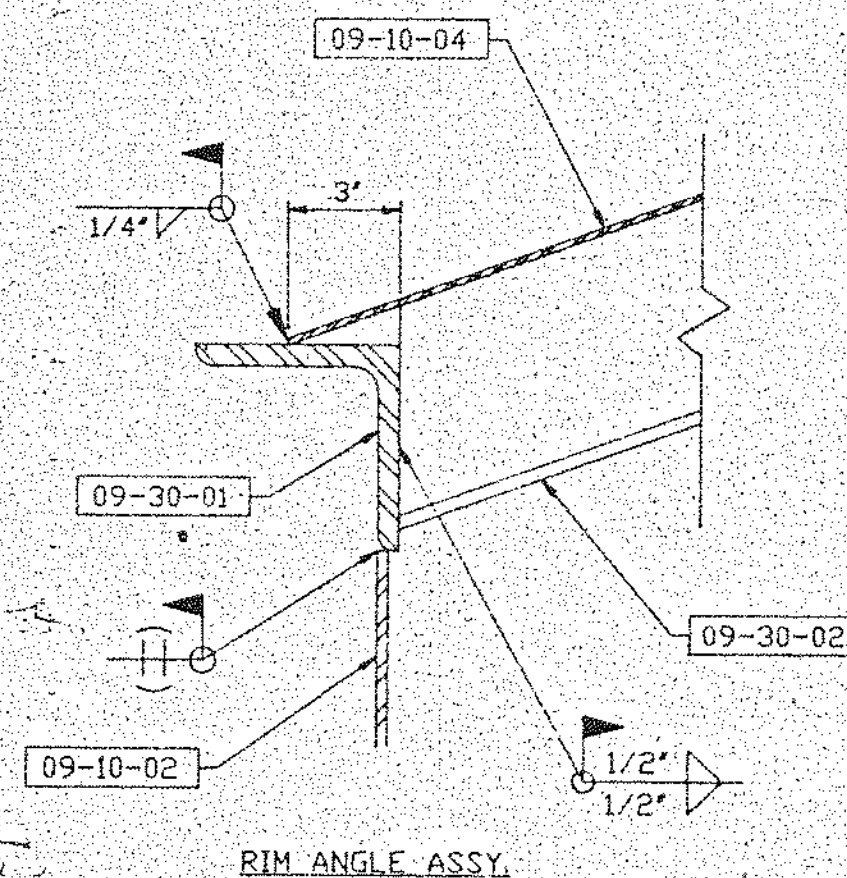
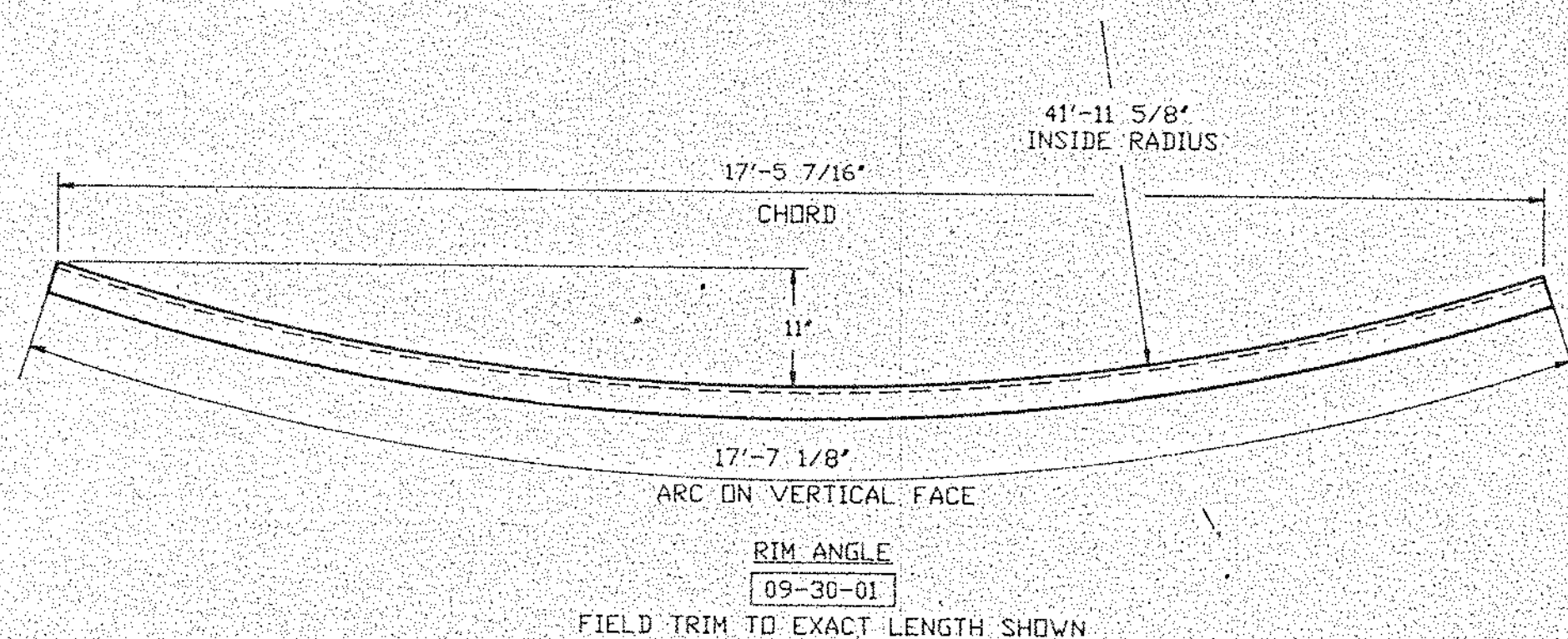
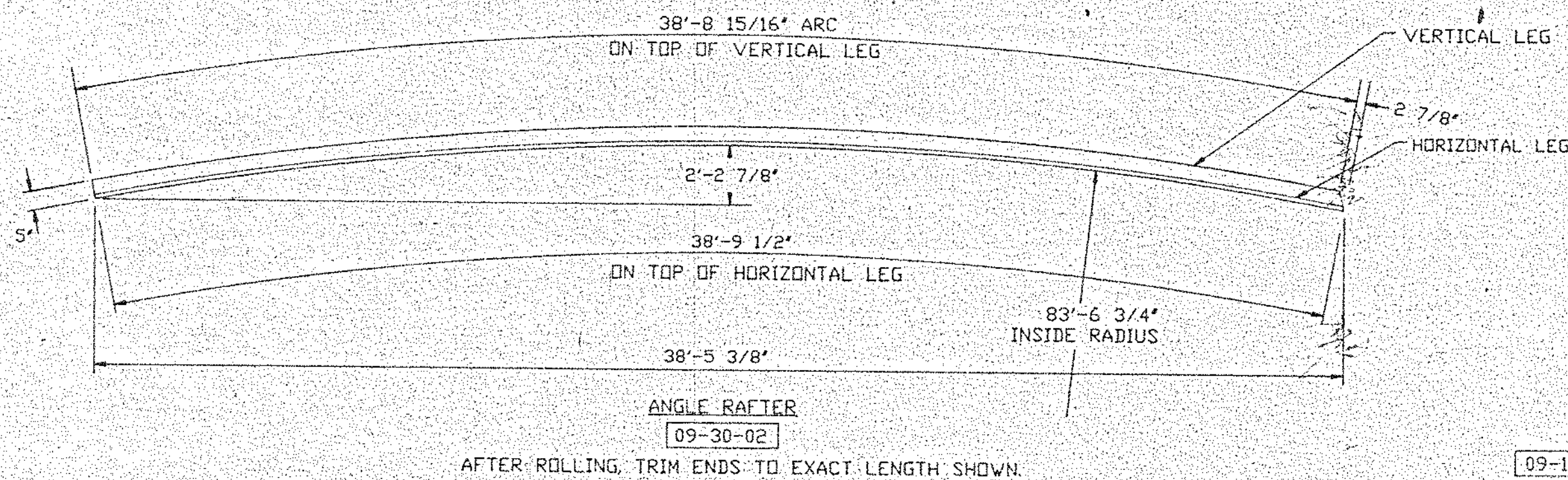
(N) 1/16" CORROSION ALLOWANCE
 NOTE:
 SEE DRAWING E-3510 05 FOR CONE WELDING
 DETAIL
 SEE DWG. E-3510 04 FOR FLUTE DETAIL.

D-13500-007-A			
REV.	BY:	DATE	REMARKS
A	RPM	5-28	AS NOTED PER
CALDWELL TANKS, INC.			
LOUISVILLE, KY			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	TITLE:	TANK CONE "C-1" DETAILS
DATE:	2-16-93	DRAWING NO.:	E-3510 07

AS BUILT DRAWING



BILL OF MATERIAL					
SUB-ASSY NO	PART NO	QTY	DESCRIPTION	MAT'L REQ'D.	PC WT
09-RS-01		40	ROOF TAIL/RAFTER ASSY		TOT. WT
	09-10-04	1	ROOF TAIL	1/4" PL.	1410
	09-30-02	1	ANGLE RAFTER	5" X 5" X 3/8" ANGLE X 40'-6" LG.	500
09-RS-02		1	ROOF TAIL/RAFTER ASSY		2410
	09-10-04	1	ROOF TAIL	1/4" PL.	1410
	09-30-02	2	ANGLE RAFTER	5" X 5" X 3/8" ANGLE X 40'-6" LG.	500
ITEMS LISTED BELOW ARE SHIPPED SEPARATELY					
	09-10-01	12	SHELL PLATE	11/32" PL.	2470
	09-10-02	12	SHELL PLATE	5/16" PL.	2245
	09-30-01	15	RIM ANGLE	6" X 6" X 3/8" ANGLE X 19'-3" LG.	290
	09-10-04	1	ROOF TAIL	1/4" PL.	1410
	09-10-03	2	(1/2) ROOF CAP	1/4" PL.	735
					1470



(N) 1/16" CORROSION ALLOWANCE

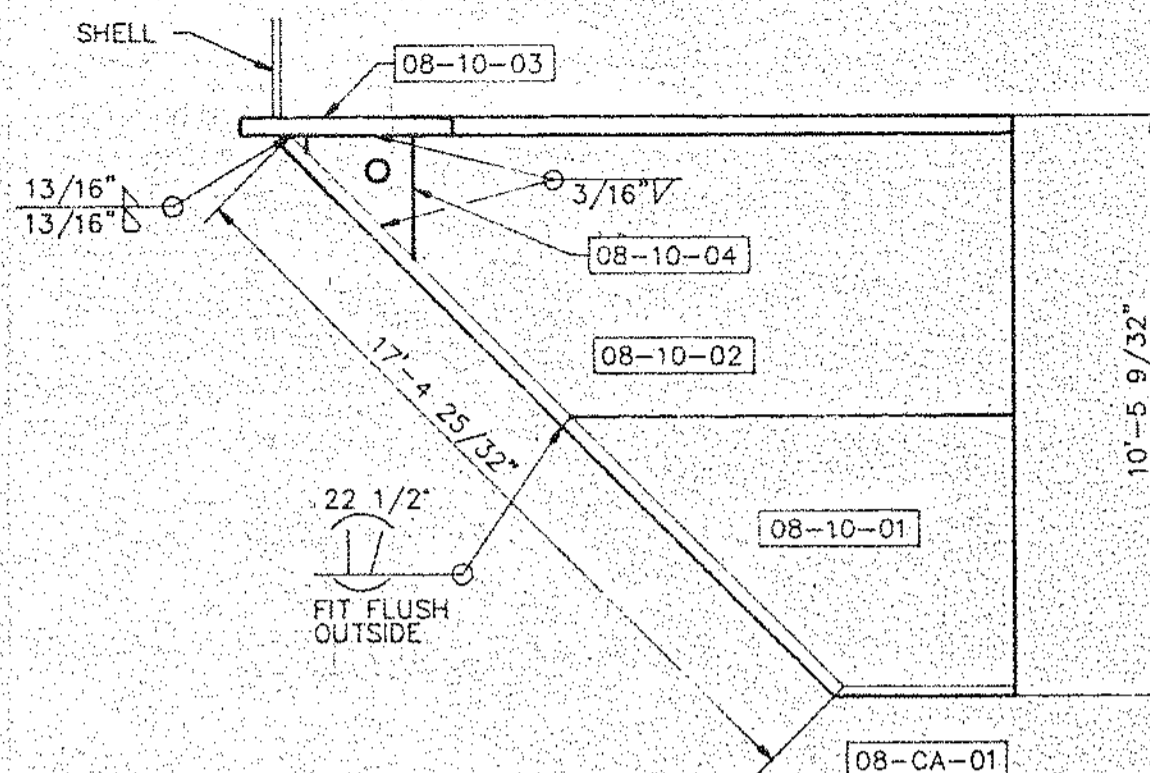
NOTE: ALL DIMENSIONS FOR SHELL PLATES ARE CALCULATED ON CENTERLINE OF PLATE.

NOTE: SEE DWG. 05 FOR ASSY. & WELDING DETAILS.
SEE DWG. 23 FOR ROOF TAIL/RAFTER ASSY.

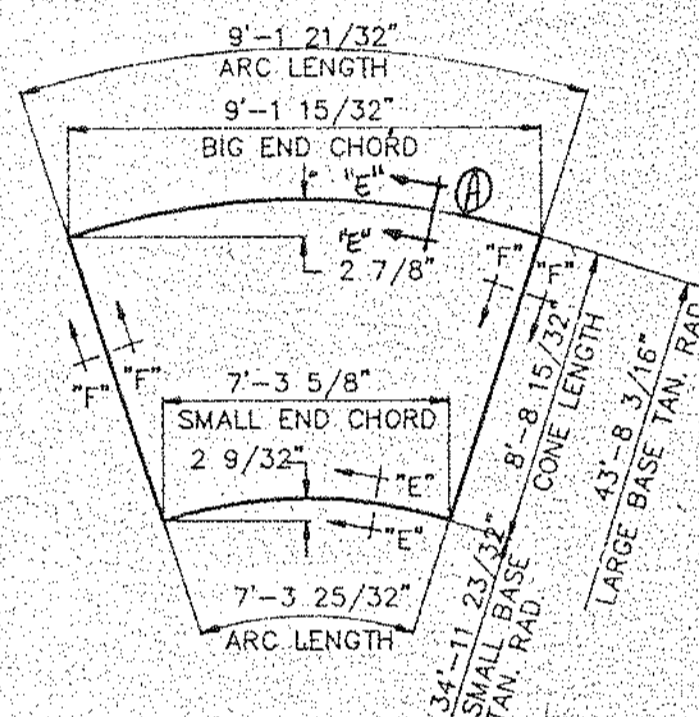
D-13500-009-A

REV.	BY	DATE	REMARKS
A	RPM	6-29	AS NOTED.
CALDWELL TANKS, INC.			
LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM/KA	TITLE:	SHELL & ROOF PIECE DETAILS
DATE:	2-23-93	DRAWING NO.:	E-3510
			09

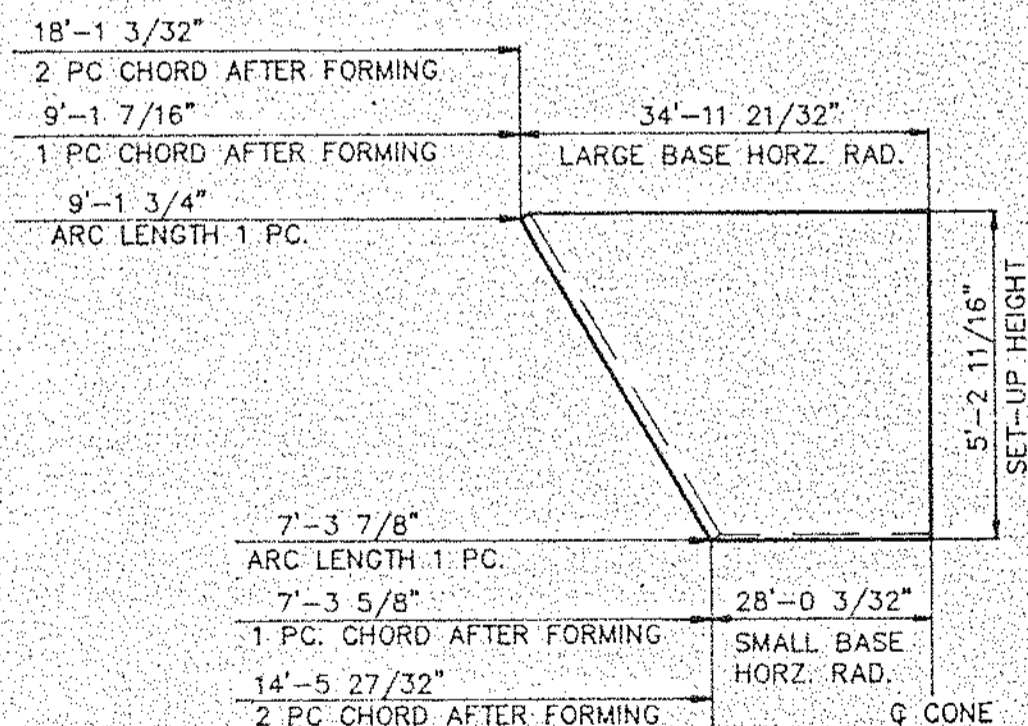
AS BUILT DRAWING



CONES & COMPRESSION RING ASSY.
DIMENSION FROM HOLE IN COMPRESSION RING GUSSET TO THE NEAREST HOLE IN UPPER TURNABLE RING IS APPROX. 41"



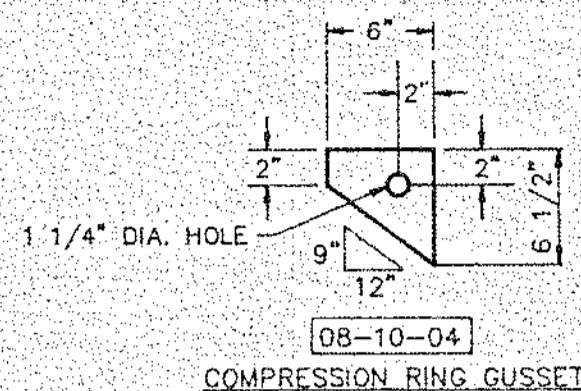
CONE "C-2" PIECE DIMENSIONS BEFORE FORMING



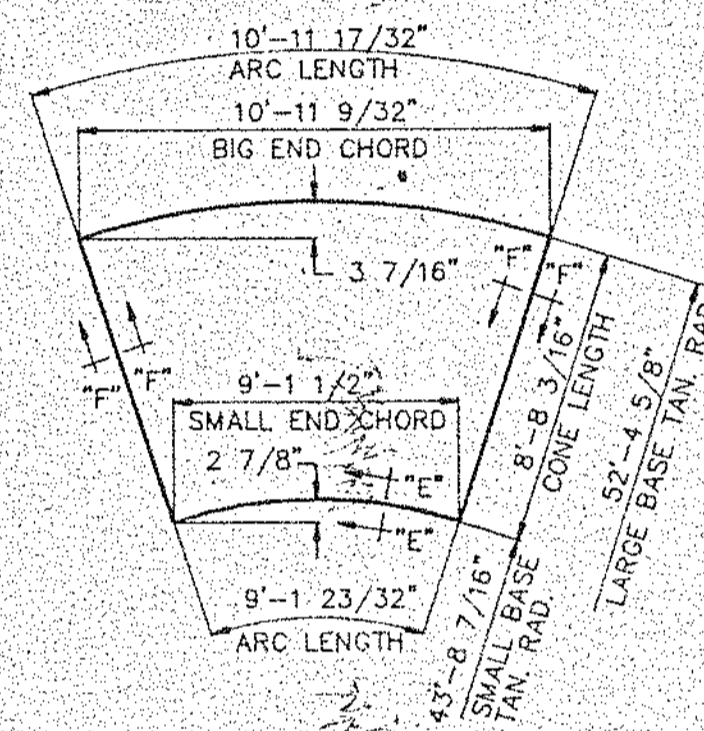
CONE "C-2" DIMENSIONS AFTER FORMING

08-10-01

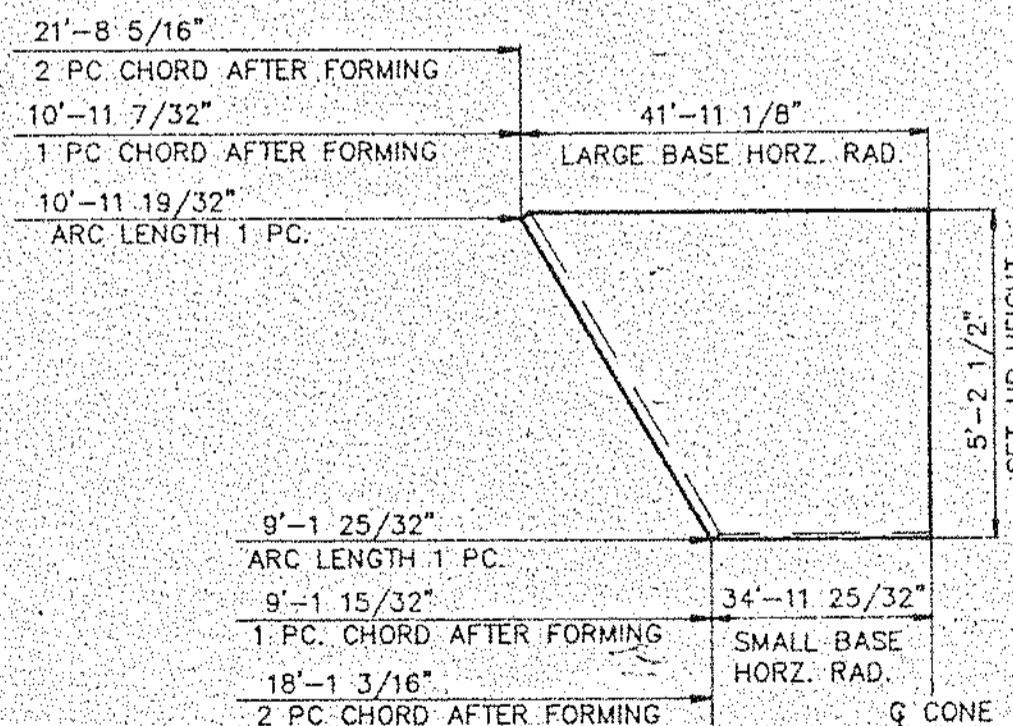
ALL DIMENSIONS ON CENTERLINE OF PLATE
PIECE DIMENSIONS ALLOW FOR 1/8" WELD GAP



COMPRESSION RING GUSSET



CONE "C-3" PIECE DIMENSIONS BEFORE FORMING

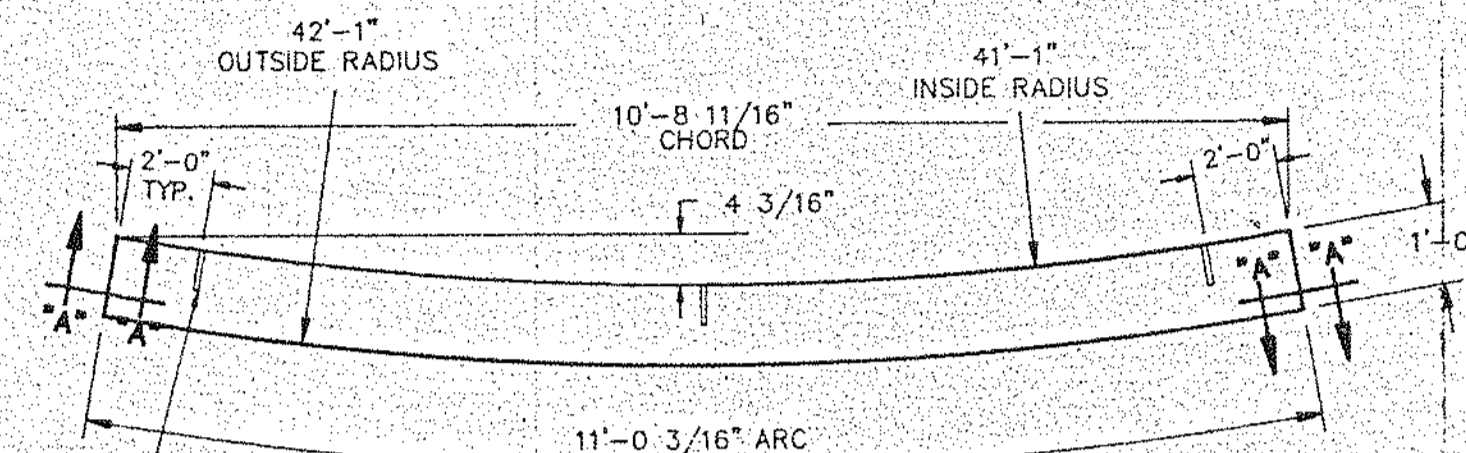


CONE "C-3" DIMENSIONS AFTER FORMING

08-10-02

ALL DIMENSIONS ON CENTERLINE OF PLATE
PIECE DIMENSIONS ALLOW FOR 1/8" WELD GAP

BILL OF MATERIAL						
SUB-ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	PC. WT.	TOT. WT.
08-CA-01		24	CONES & COMPRESSION RING ASSY.			6270
	08-10-01	1	CONE "C-2"	1 1/16" PL.	3110	
	08-10-02	1	CONE "C-3"	13/16" PL.	2920	
	08-10-03	1	COMPRESSION RING	1/2" PL.	225	
	08-10-04	3	COMPRESSION RING GUSSET	1/2" PL.	5	

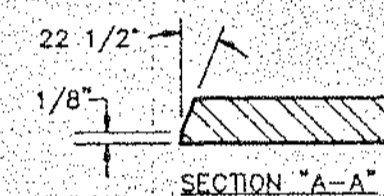


FLATTEN PLATE AFTER BURNING

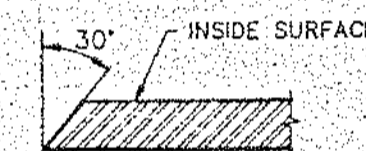
CONE COMPRESSION RING

08-10-03

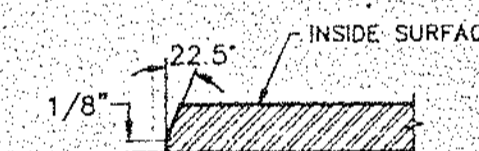
CHORD ACROSS 2 PCS. ON INSIDE RADIUS = 21'-3 3/16"



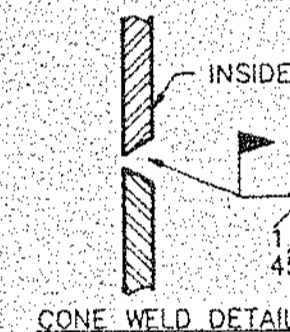
SECTION "A-A"



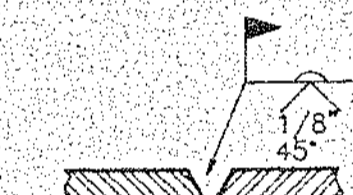
SECTION "F-F"



SECTION "E-E"



CONE WELD DETAIL



TENSION RING WELD DETAIL

(N) 1/16" CORROSION ALLOWANCE

NOTE:

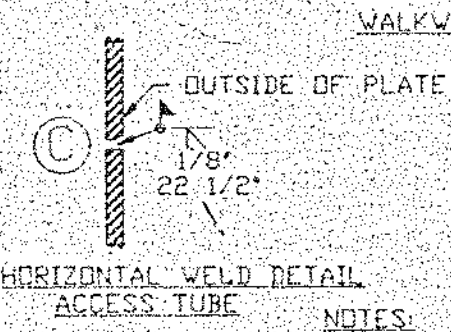
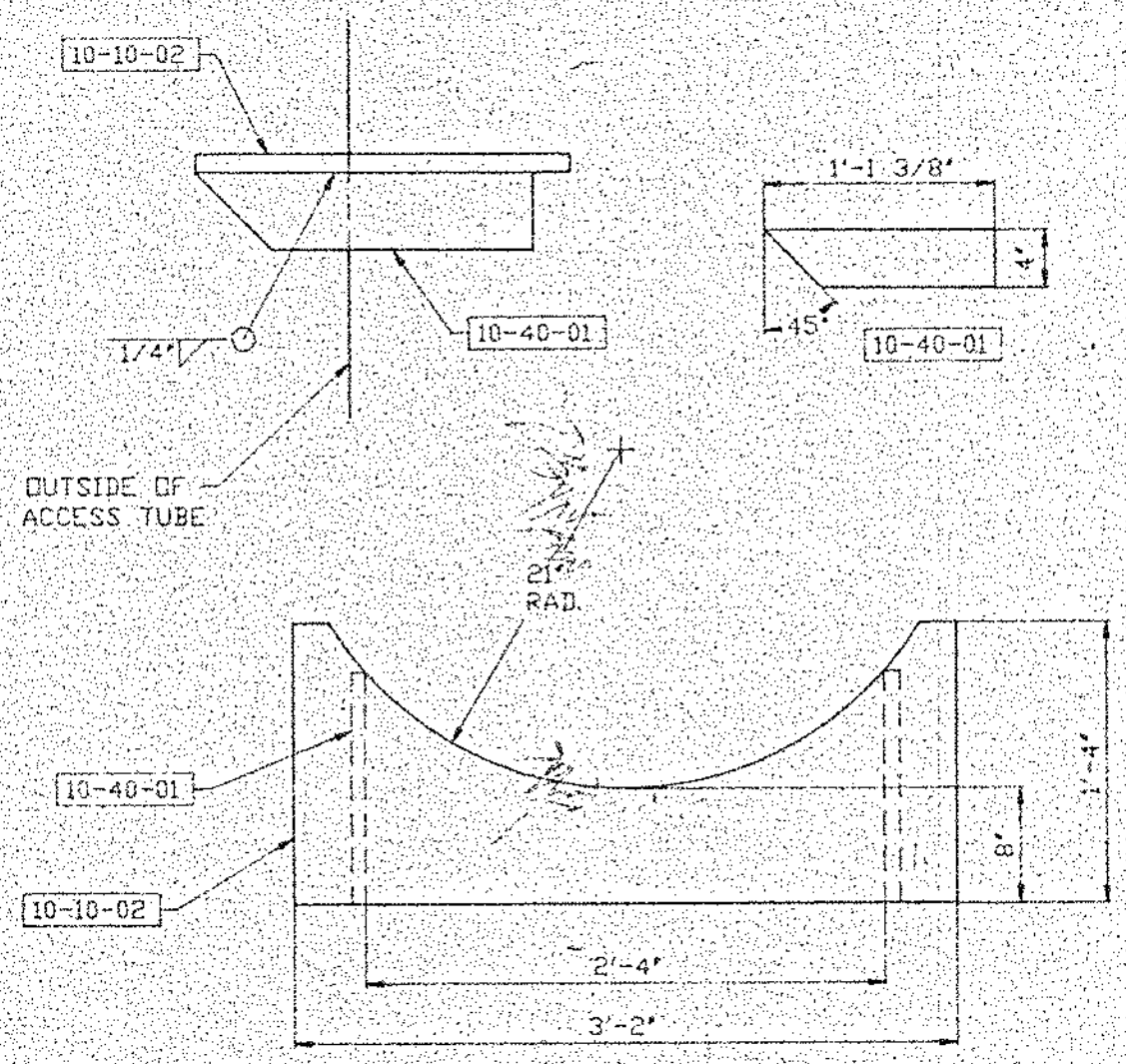
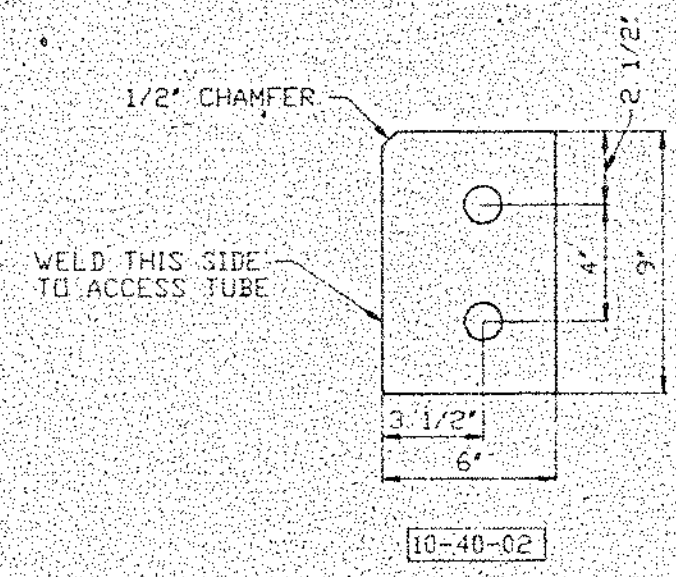
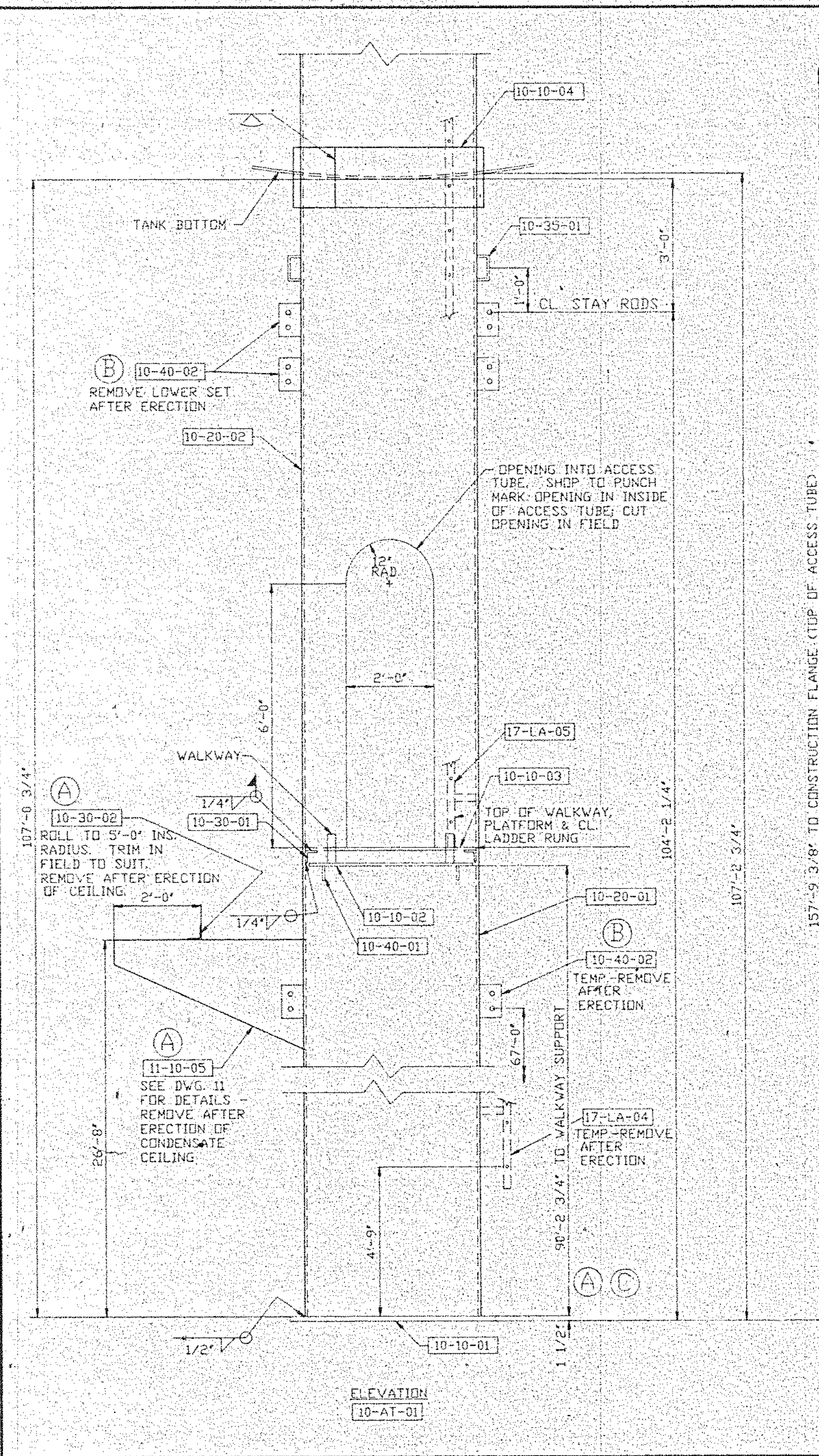
1. SEE DRAWING E-3510 05 FOR WELDING DETAILS.

D-13500-008-A

REV.	BY:	DATE	REMARKS
H	RPM	5-20	AS NOTED. JER
CALDWELL TANKS, INC.			
LOUISVILLE, KY			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	DATE	TITLE: TANK CONES & COMPRESSION RING DETAILS
DATE:	2-15-93	DRAWING NO.:	E-3510 08

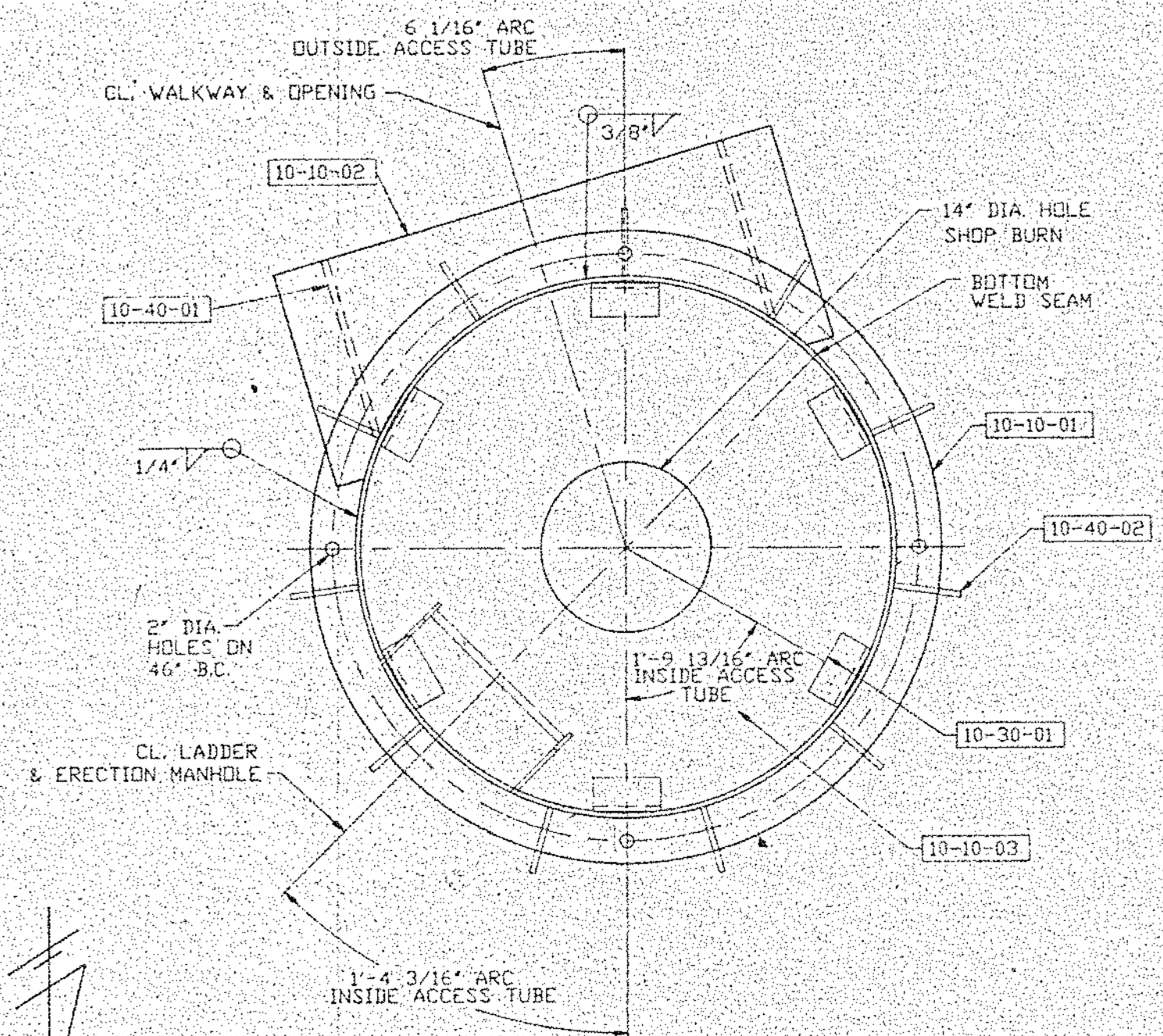
ALL DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE SPECIFIED
AND ARE TO BE IN CONFORMANCE WITH
THE REQUIREMENTS OF THE CONTRACT
DOCUMENTS

AS BUILT DRAWING



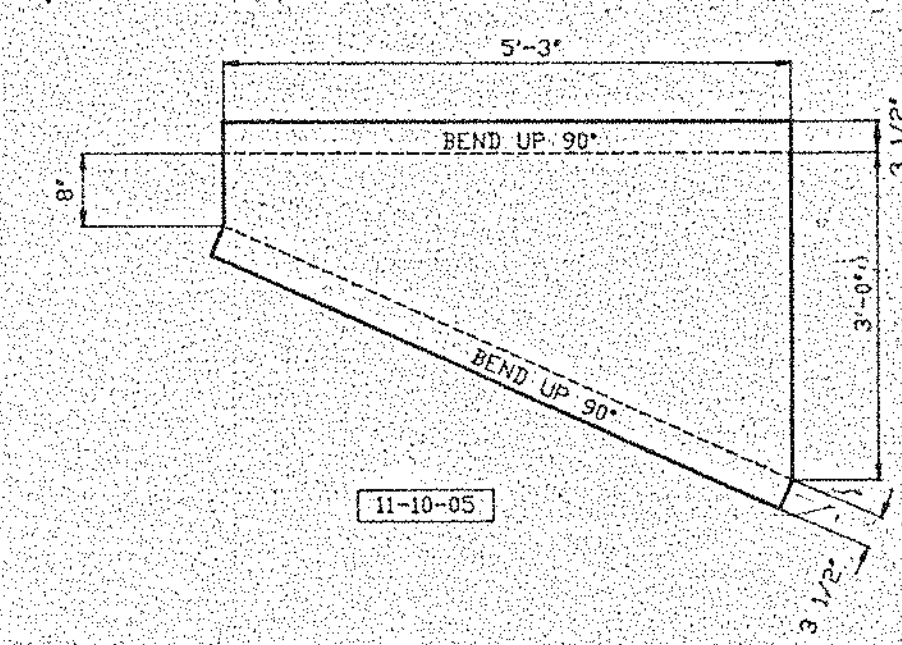
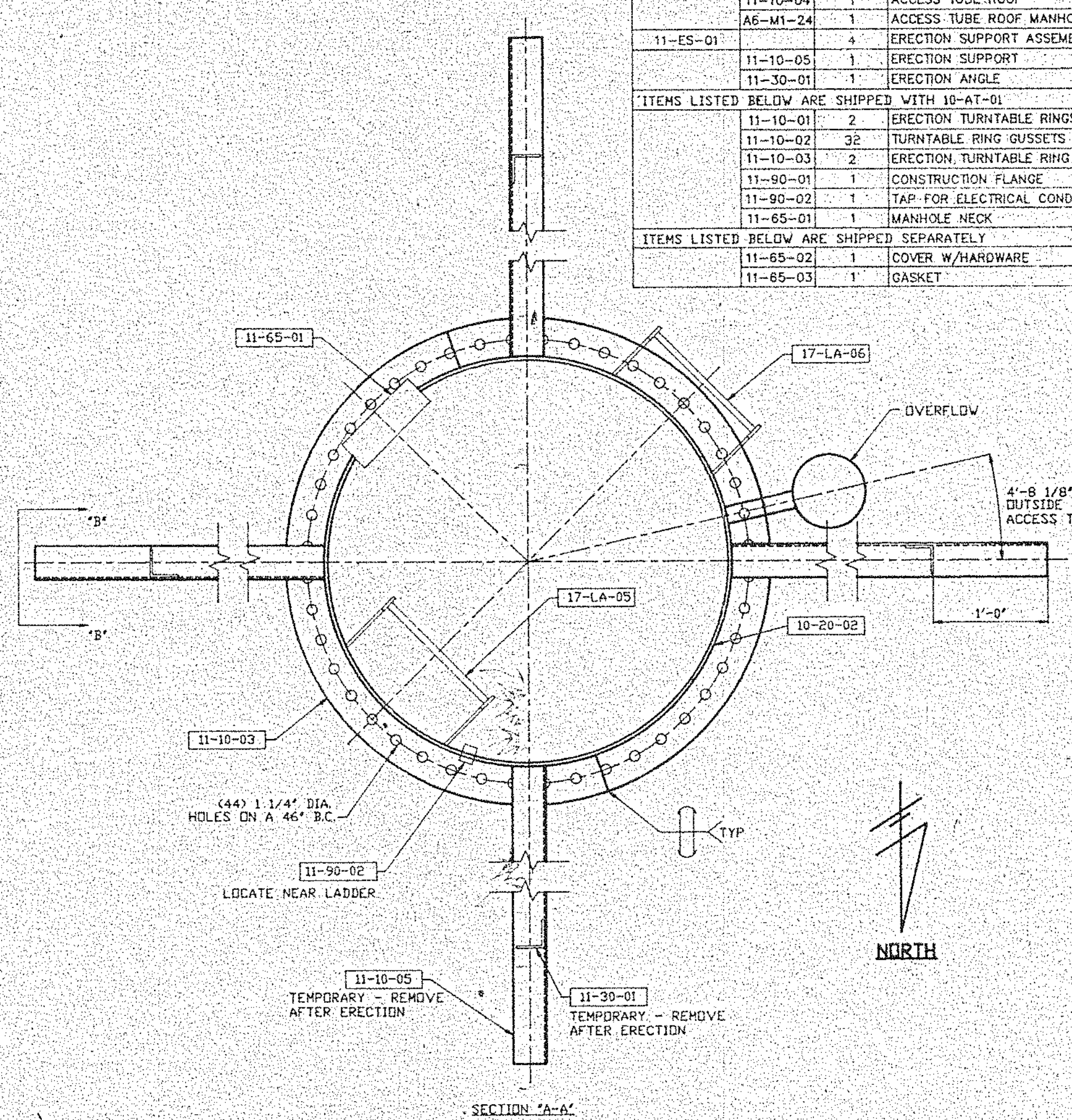
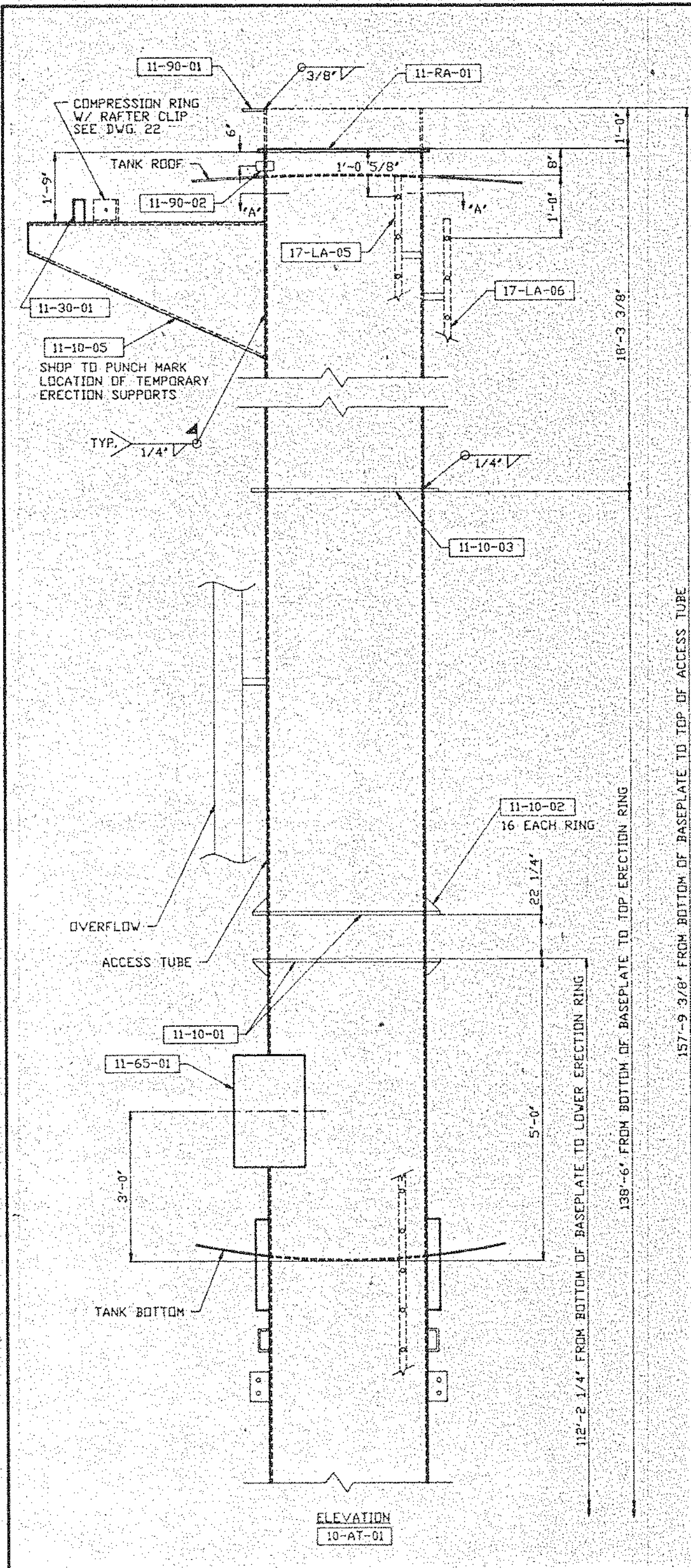
- NOTES:
1. SEE DWG. #17 FOR LADDER DETAILS.
 2. RISER AND ACCESS TUBE TO BE DIVIDED INTO STANDARD SHIPPING LENGTHS ACCORDING TO SHOP'S DISCRETION.
 3. LOWER PORTION OF RISER IS UNDERGROUND AND FASTENED WITH ANCHOR BOLTS.
 4. SEE DWG. #11 FOR DETAILS ON UPPER PORTION OF ACCESS TUBE.
 5. DO NOT REMOVE RISER AFTER ERECTION.

BILL OF MATERIAL						
SUB ASSY. NO.	PART NO.	QTY.	DESCRIPTION	MATERIAL REQ'D	PC. WT.	TOTAL
10-AT-01		1	RISER/ACCESS TUBE ASSY.			29,386
(C)	10-20-01	1	RISER (A)	42" OD x 3/8" WL x 89'-9" LG.	15,000	
	10-20-02	1	ACCESS TUBE	42" OD x 3/8" WL x 69'-0" LG.	11,350	
	10-10-01	1	BASEPLATE	50" OD X 1 1/2" THK. X 34" ID	450	
	17-LA-04	1	TEMP. RISER LADDER	SEE DWG. 17	600	
	17-LA-05	1	ACCESS TUBE LADDER	SEE DWG. 17	470	
	10-10-02	1	WALKWAY SUPPORT	1/2" PL	100	
	10-40-01	2	WALKWAY SUPPORT GUSSETS	4" X 3/8" X 13 3/8" LG.	7	
	10-30-01	6	PLATFORM SUPPORT ANGLE	3" X 3" X 1/4" ANGLE X 6" LG.	2	
	10-10-04	1	REINFORCING RING	12" X 1" PL X 134 5/16" LG.	460	
	(B)	10-40-02	33	STAY ROD CLIPS	1/2" THK. (STOCK PART)	
10-35-01		11	COLUMN CLIPS	5/8" DIA. X 12-3/4" LG. ROUND BAR (STOCK)		
11-10-01		2	LOWER TURNABLE RING	SEE DWG. 11	295	
11-10-02		32	TURNABLE GUSSETS	SEE DWG. 11	1	
11-90-01		1	CONSTRUCTION FLANGE	SEE DWG. 11		
11-10-03		2	UPPER TURNABLE RING	SEE DWG. 11	75	
11-90-02		1	COUPLING FOR ELECTRICAL	SEE DWG. 11		
ALL ITEMS LISTED BELOW ARE SHIPPED SEPARATELY						
(A)	10-10-03	1	PLATFORM FLOOR	40" DIA. X 1/4" PL	90	
	11-10-05	4	ERECTION SUPPORT	43" x 3/8" x 63" PL	200	800
	10-60-02	2	ERECTION ANGLE	(1/2)" 4" x 4" X 1/4" ANGLE x 17'-9" LG.	120	240

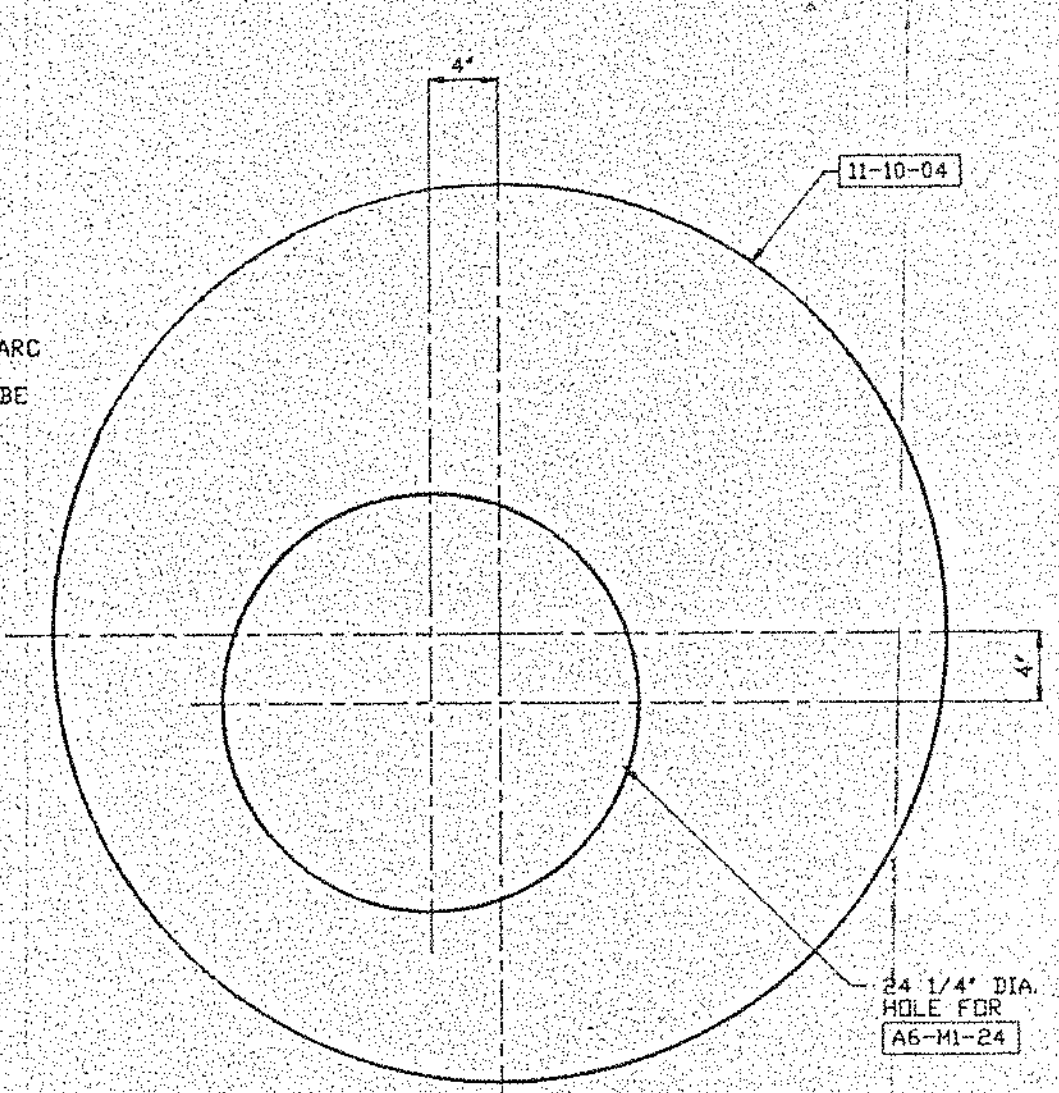


ORIENTATION D-13500-010-A			
C	RPM	8-24	AS NOTED
B	RPM	8-5	AS NOTED
A	RPM	6-3	AS NOTED
REV.	BY	DATE	REMARKS
CALDWELL TANKS, INC.			
LOUISVILLE, KY			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	TITLE:	RISER/ACCESS TUBE DETAILS
DATE:	2-10-93	DRAWING NO:	E-3510 10

AS BUILT DRAWING



BILL OF MATERIAL					
SUB-ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	PC. WT. TOTAL WT.
11-RA-01		1	ACCESS TUBE ROOF ASSY.		225
	11-10-04	1	ACCESS TUBE ROOF	46" DIA. X 3/16" THK. PL.	65
	A6-M1-24	1	ACCESS TUBE ROOF MANHOLE	SEE DWG. 25	160
11-ES-01		4	ERECTION SUPPORT ASSEMBLY		812
	11-10-05	1	ERECTION SUPPORT	43" X 3/8" X 63" PL.	200
	11-30-01	1	ERECTION ANGLE	3" X 3" X 1/4" ANGLE X 6" LG.	3
ITEMS LISTED BELOW ARE SHIPPED WITH 10-AT-01					
	11-10-01	2	ERECTION TURNABLE RINGS W/O HOLES	55 1/2" DD X 1" THK. X 42 3/8" ID	295
	11-10-02	32	TURNABLE RING GUSSETS	1/2" THK.	
	11-10-03	2	ERECTION TURNABLE RING W/ HOLES	(1/2) 50 1/2" DD X 1/2" THK. X 42 3/8" ID RING	42
	11-90-01	1	CONSTRUCTION FLANGE	FOR 42" ACCESS TUBE	84
	11-90-02	1	TAP FOR ELECTRICAL CONDUIT	2" - 3000# COUPLING W/PLUG	
	11-65-01	1	MANHOLE NECK	14" X 18" ELLIPTICAL MANHOLE	
ITEMS LISTED BELOW ARE SHIPPED SEPARATELY					
	11-65-02	1	COVER W/HARDWARE	FOR 14" X 18" MANHOLE	
	11-65-03	1	GASKET	FOR 14" X 18" MANHOLE	

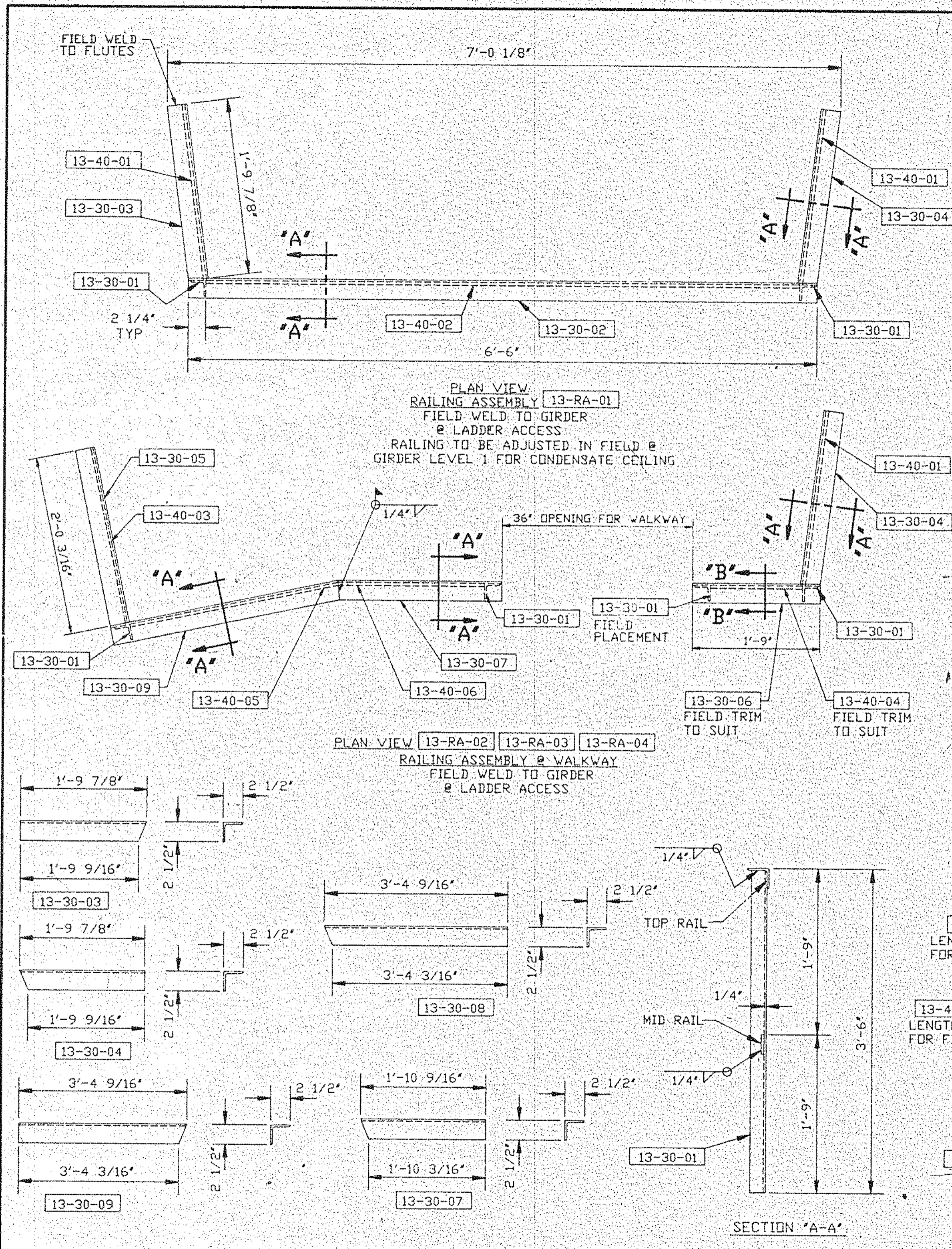


- NOTES:
- SEE DWG. #10 FOR DETAILS ON LOWER PORTION OF ACCESS TUBE.
 - THE AREA BETWEEN TURNABLE RINGS SHALL BE FREE OF WELD SEAMS.
 - SEE DWG. #20 FOR OVERFLOW DETAILS.

D-13500-011-A

REV.	BY	DATE	REMARKS
<p>CALDWELL TANKS, INC.</p> <p>LOUISVILLE, KY.</p> <p>FAYETTEVILLE, NORTH CAROLINA</p>			
BY:	RPM	DATE:	TITLE: ACCESS TUBE DETAILS
		2-23-93	DRAWING NO. E-3510

11



SUB ASS'Y NO.	PART NO.	QTY	DESCRIPTION	MATERIAL REQ'D.	PC WT	TOT WT
13-RA-01		4	GIRDER RAILING ASSEMBLY			107
	13-30-01	2	RAIL POST (PER ASSY)	2"x 2"x 3/8" ANGLE x 3'-5 3/4"	16	
	13-30-02	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 6'-6" LG.	27	
	13-30-03	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 1'-9 7/8" LH	8	
	13-30-04	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 1'-9 7/8" RH	8	
	13-40-02	1	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 6'-1" LG.	20	
	13-40-01	2	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 1'-9 7/8" LG.	6	
13-RA-02		2	GIRDER RAILING ASSEMBLY			57
	13-30-01	1	RAIL POST (PER ASSY)	2"x 2"x 3/8" ANGLE x 3'-5 3/4"	16	
	13-30-05	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 2'-0 3/16" LG.	9	
	13-30-09	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 3'-4 9/16" LH	14	
	13-40-03	1	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 2'-0 3/16" LG.	7	
	13-40-05	1	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 3'-2 1/16" LG.	11	
13-RA-03		1	GIRDER RAILING ASSEMBLY			30
	13-30-01	1	RAIL POST (PER ASSY)	2"x 2"x 3/8" ANGLE x 3'-5 3/4"	16	
	13-30-07	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 1'-10 9/16" LG.	8	
	13-40-06	1	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 1'-10 9/16" LG.	6	
13-RA-04		1	GIRDER RAILING ASSEMBLY			46
	13-30-01	1	RAIL POST (PER ASSY)	2"x 2"x 3/8" ANGLE x 3'-5 3/4"	16	
	13-30-06	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 2'-3" LG.	10	
	13-30-04	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 1'-9 7/8" RH	8	
	13-40-04	1	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 1'-10" LG.	6	
	13-40-01	1	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 1'-9 7/8" LG.	6	
13-RA-05		1	GIRDER RAILING ASSEMBLY			57
	13-30-01	1	RAIL POST (PER ASSY)	2"x 2"x 3/8" ANGLE x 3'-5 3/4"	16	
	13-30-05	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 2'-0 3/16" LG.	9	
	13-30-08	1	TOP RAIL (PER ASSY)	2 1/2" X 2 1/2" X 1/4" ANGLE X 3'-4 9/16" RH	14	
	13-40-03	1	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 2'-0 3/16" LG.	7	
	13-40-05	1	MID RAIL (PER ASSY)	2 1/2" X 3/8" BAR X 3'-2 1/16" LG.	11	
ALL ITEMS LISTED BELOW ARE SHIPPED LOOSE						
	13-30-01	1	RAIL POST	2"x 2"x 3/8" ANGLE x 3'-5 3/4"	16	

PLAN VIEW 13-RA-02 13-RA-05
RAILING ASSEMBLY @ LEVEL 4
FIELD WELD TO GIRDER @ LADDER ACCESS

D-13500-013-A

REV.	BY	DATE	REMARKS

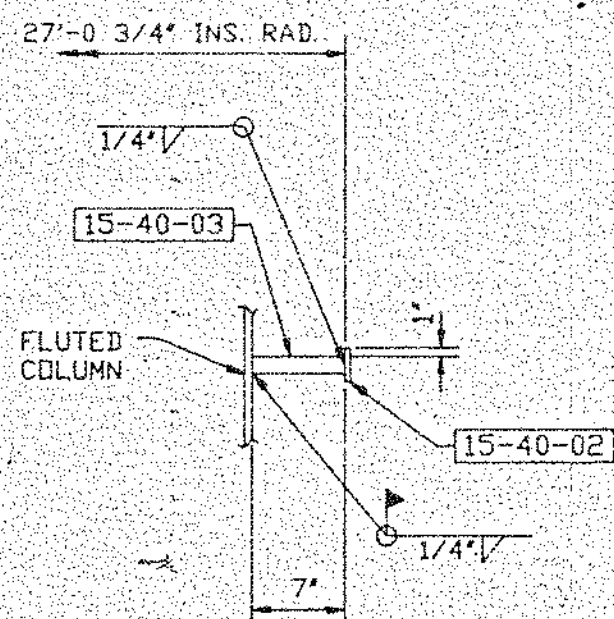
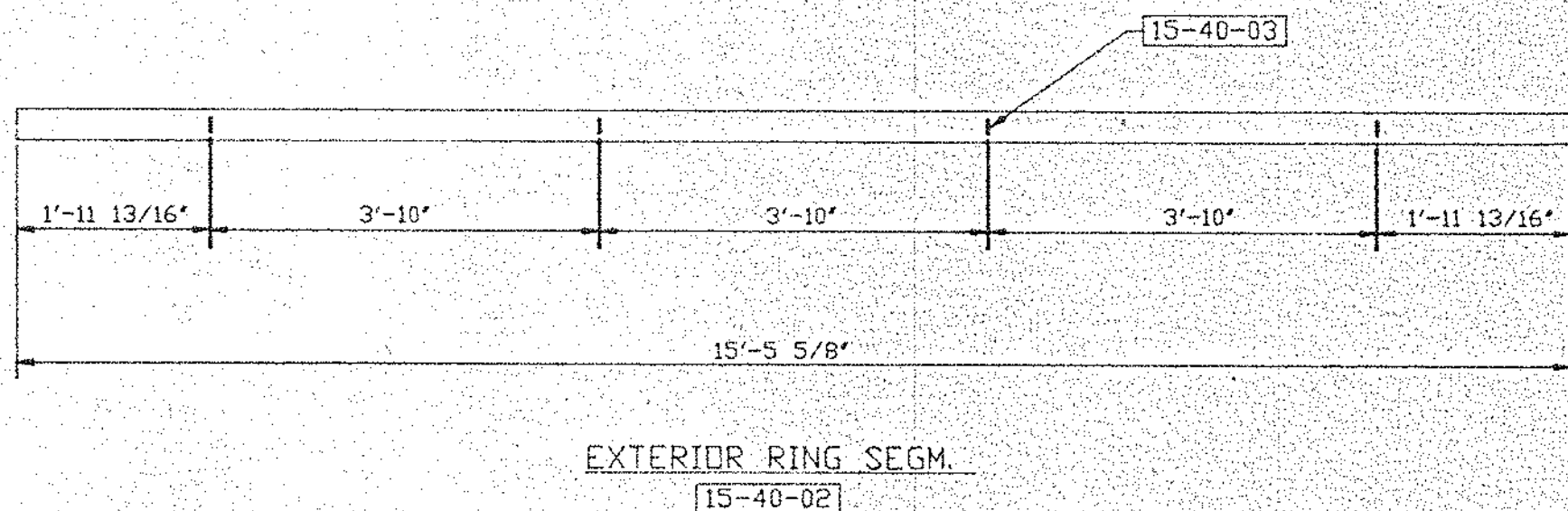
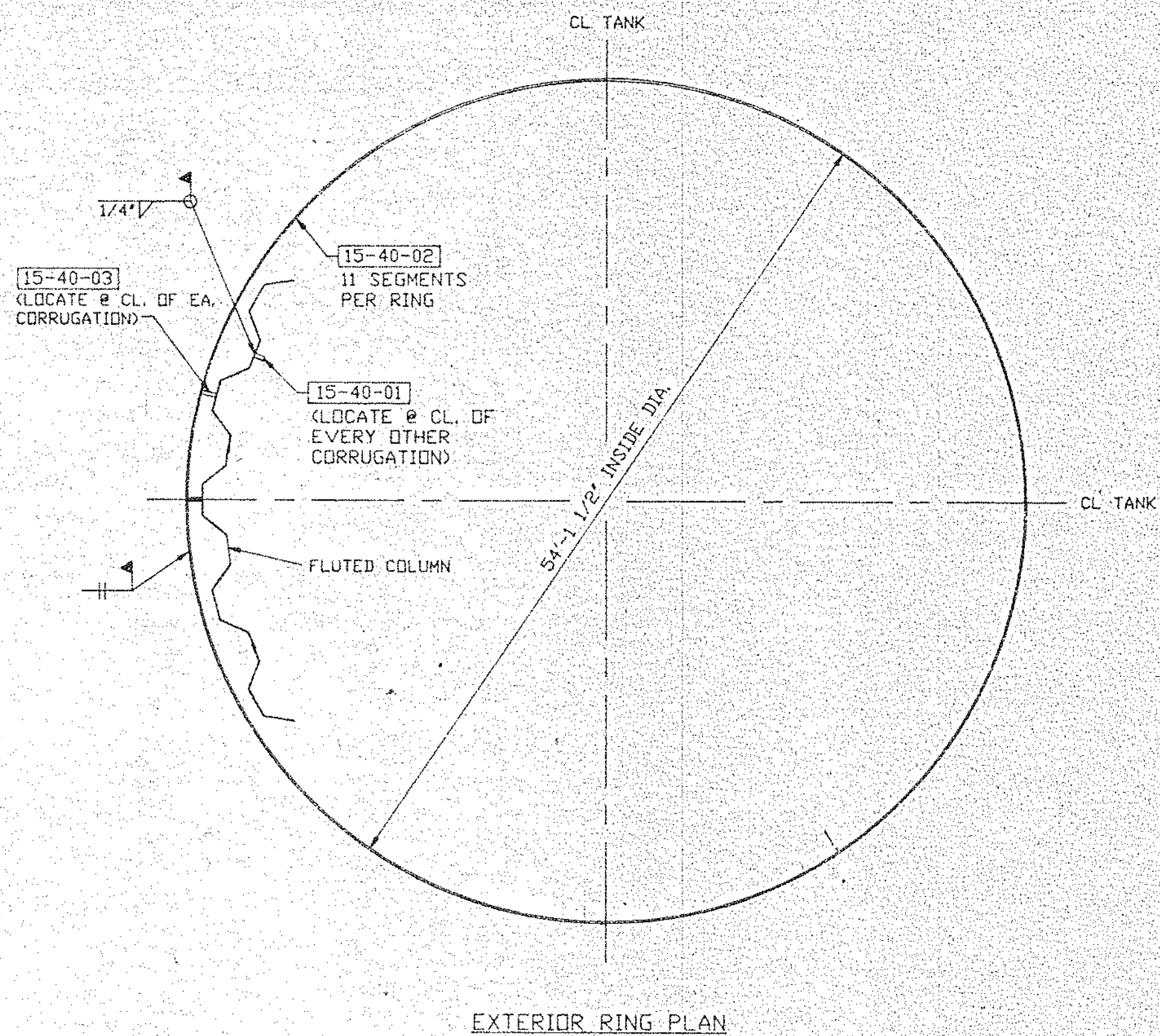
CALDWELL TANKS, INC.
LOUISVILLE, KY

FAYETTEVILLE, NORTH CAROLINA

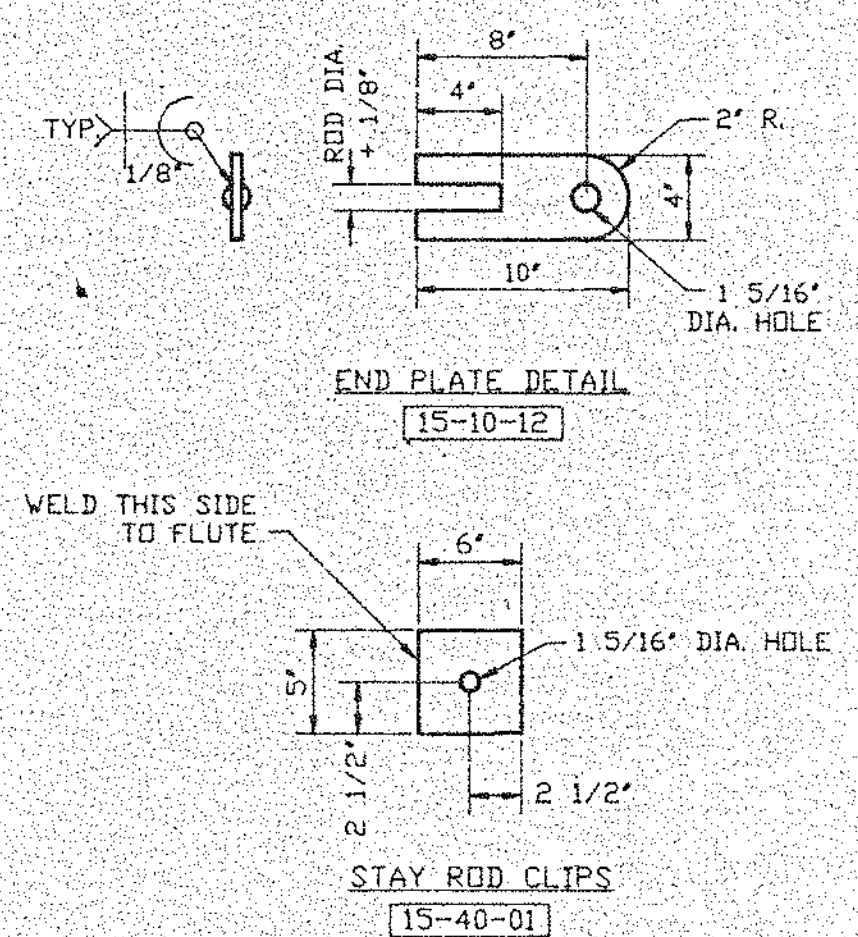
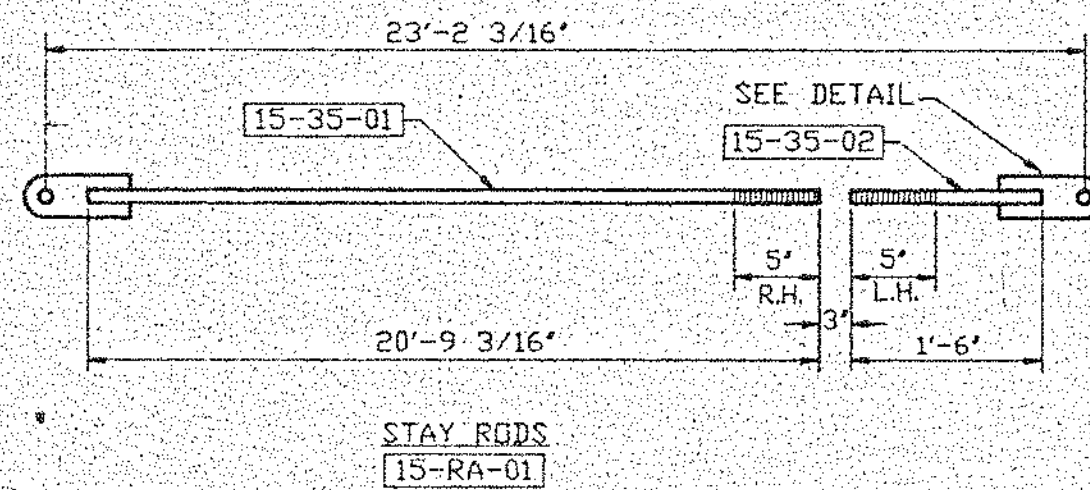
BY: RPM/ger TITLE: GIRDER RAILING
DATE: 2-9-93 DRAWING NO: E-3510

13

AS BUILT DRAWING



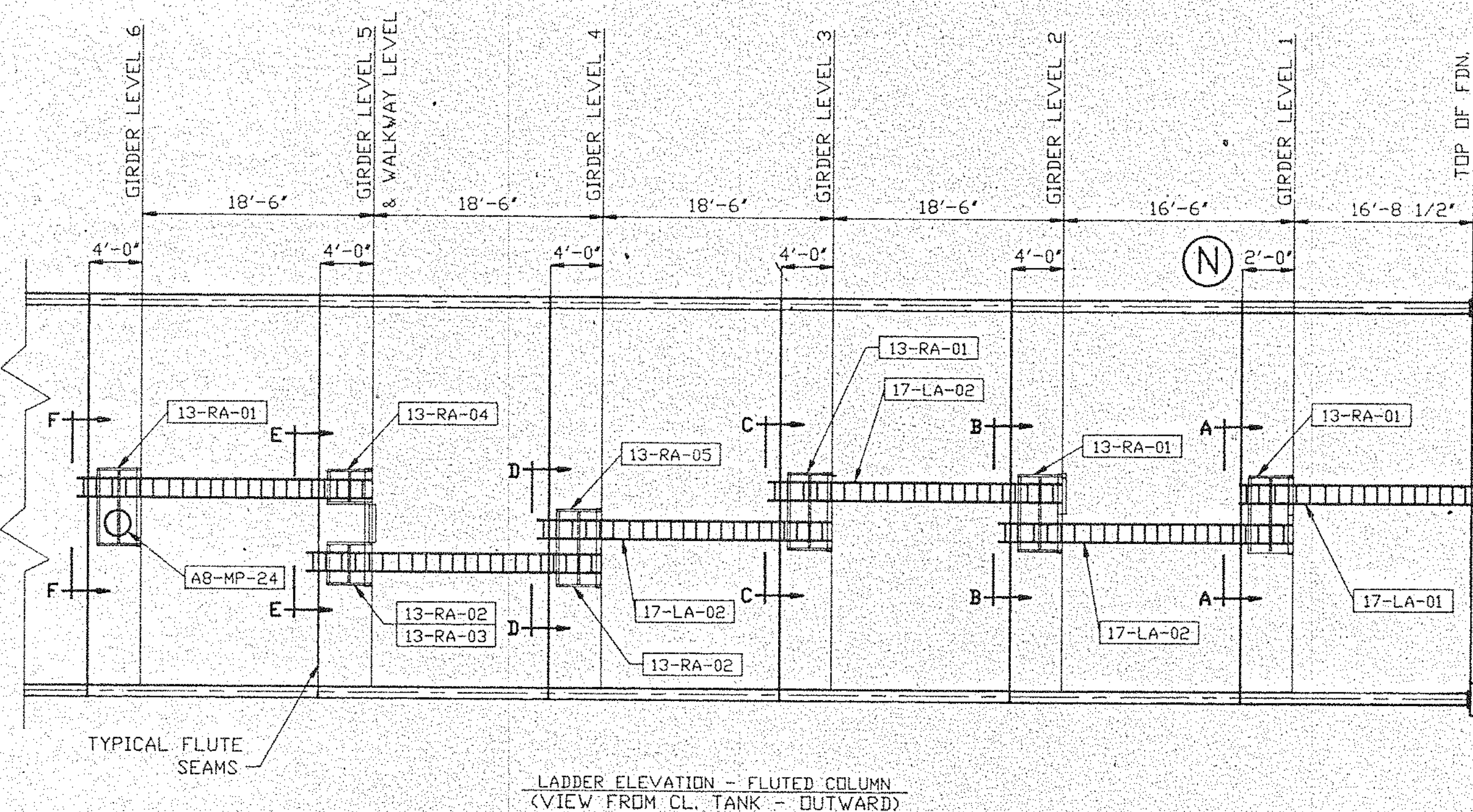
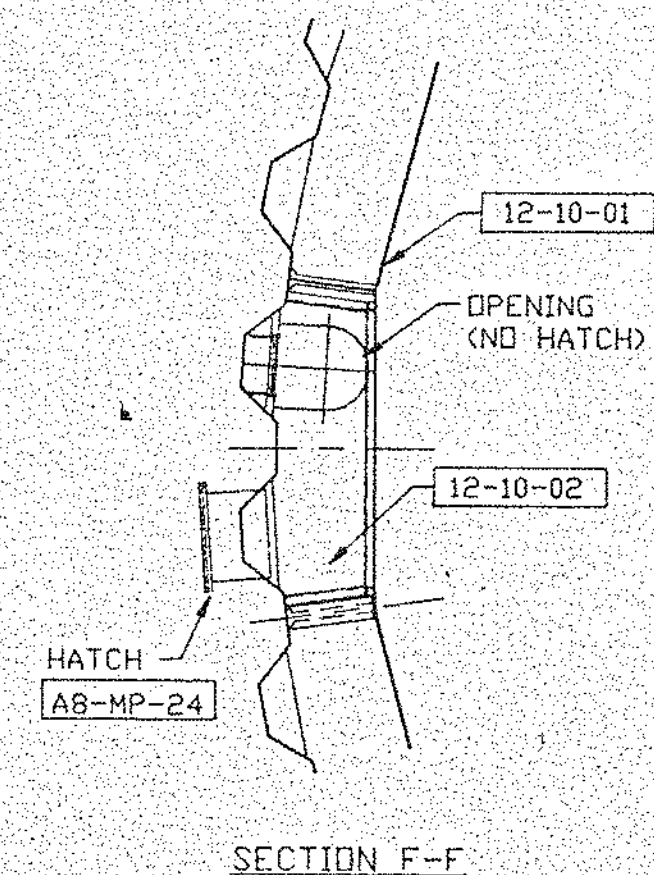
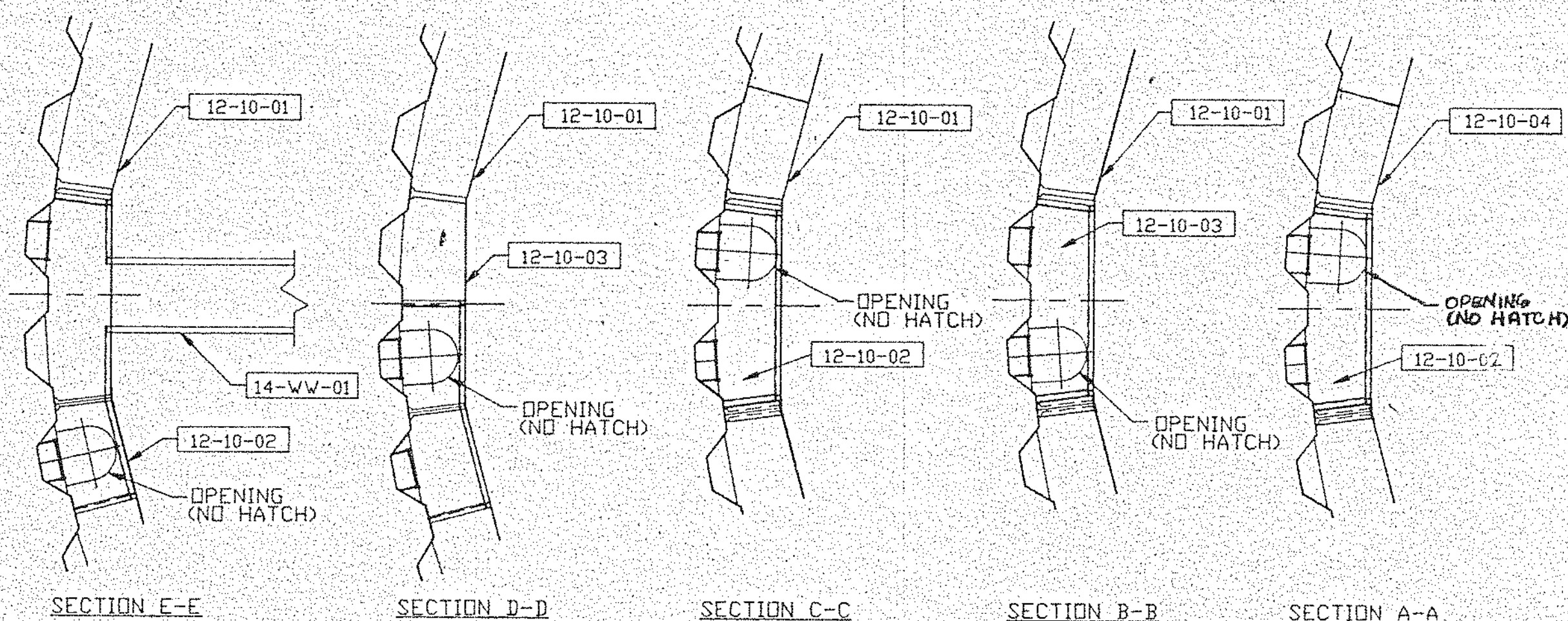
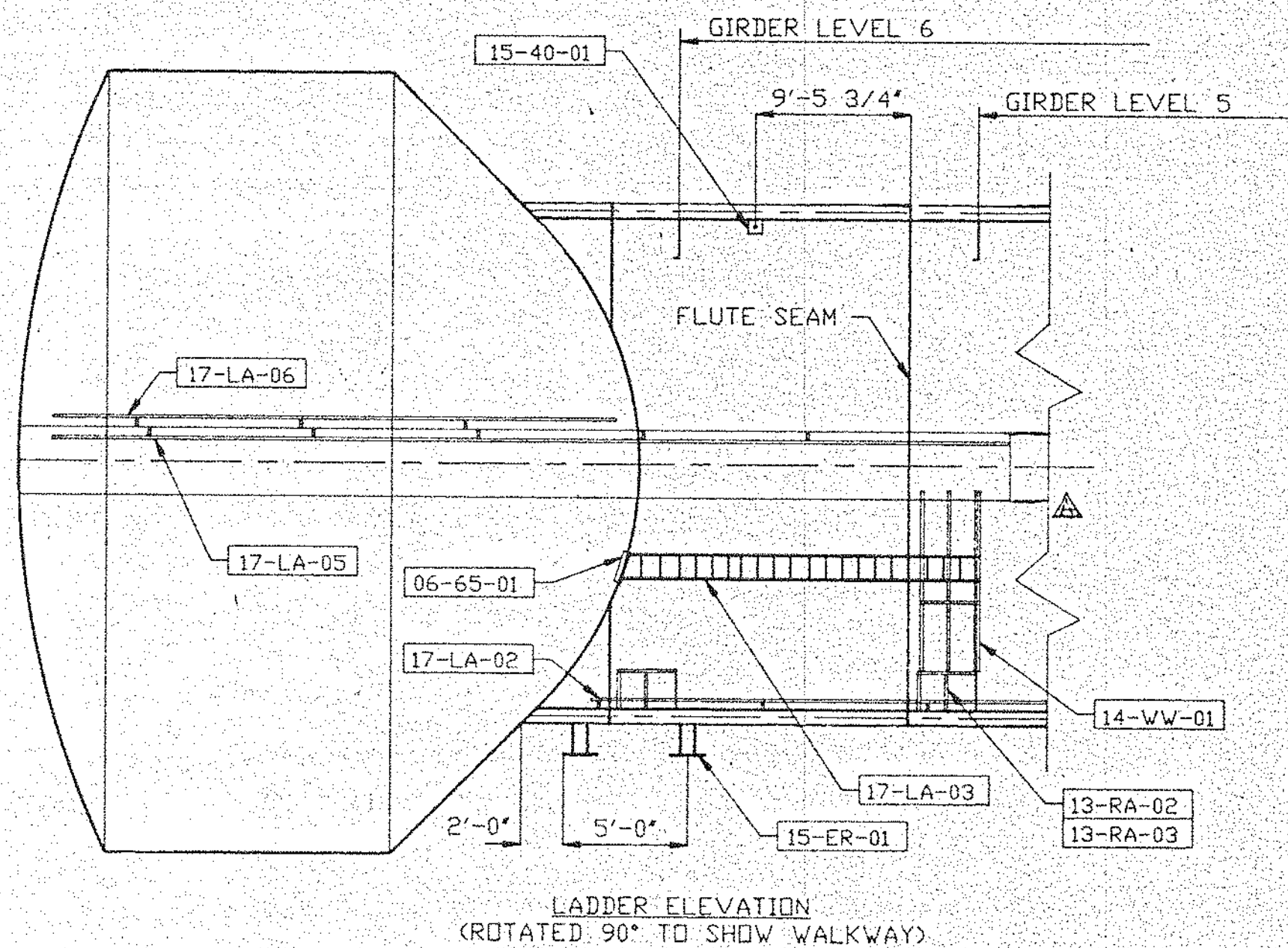
SUB ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	P.C. WT.	TOT. WT.
15-ER-01		22	EXTERIOR COLUMN RING			88
	15-40-02	1	RING	4" X 3/8" ROLLED FLAT BAR X 15'-5 5/8"	80	
	15-40-03	4	BRACE	2 1/2" X 3/8" BAR X 7' LG.	2	
15-RA-01		11	STAY ROD ASSEMBLY			105
	15-35-01	1	ROD	1 1/4" DIA. ROUND BAR X 20'-9 3/16" LG.	87	
	15-35-02	1	STUB ROD	1 1/4" DIA. ROUND BAR X 1'-6" LG.	6	
	15-10-12	2	END PLATE	1/2" PLATE (STOCK PART)	6	
	15-60-01	1	TURNBUCKLE	1 1/4" W/6" TAKE-UP		
ITEMS SHIPPED BELOW ARE SHIPPED SEPARATELY						
	15-40-01	11	STAY ROD CLIP	STOCK PART		
	15-86-01	22	STAY ROD BOLT	1 1/4" X 3" H.S. BOLT W/NUT		



- NOTES:
1. SEE DWG. 16 FOR ELEVATION OF EXTERIOR COLUMN RINGS.
 2. SEE DWGS. 10 & 16 FOR ELEVATION OF STAY RODS.
 3. SEE DWG. 02 FOR ORIENTATION OF STAY RODS.

D-13500-015-A			
REV.	BY	DATE	REMARKS
CALDWELL TANKS, INC. LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY	RPM/ger	TITLE	EXTERIOR RINGS & STAY RODS
DATE	2-10-93	DRAWING NO.	E-3510
			15

AS BUILT DRAWING



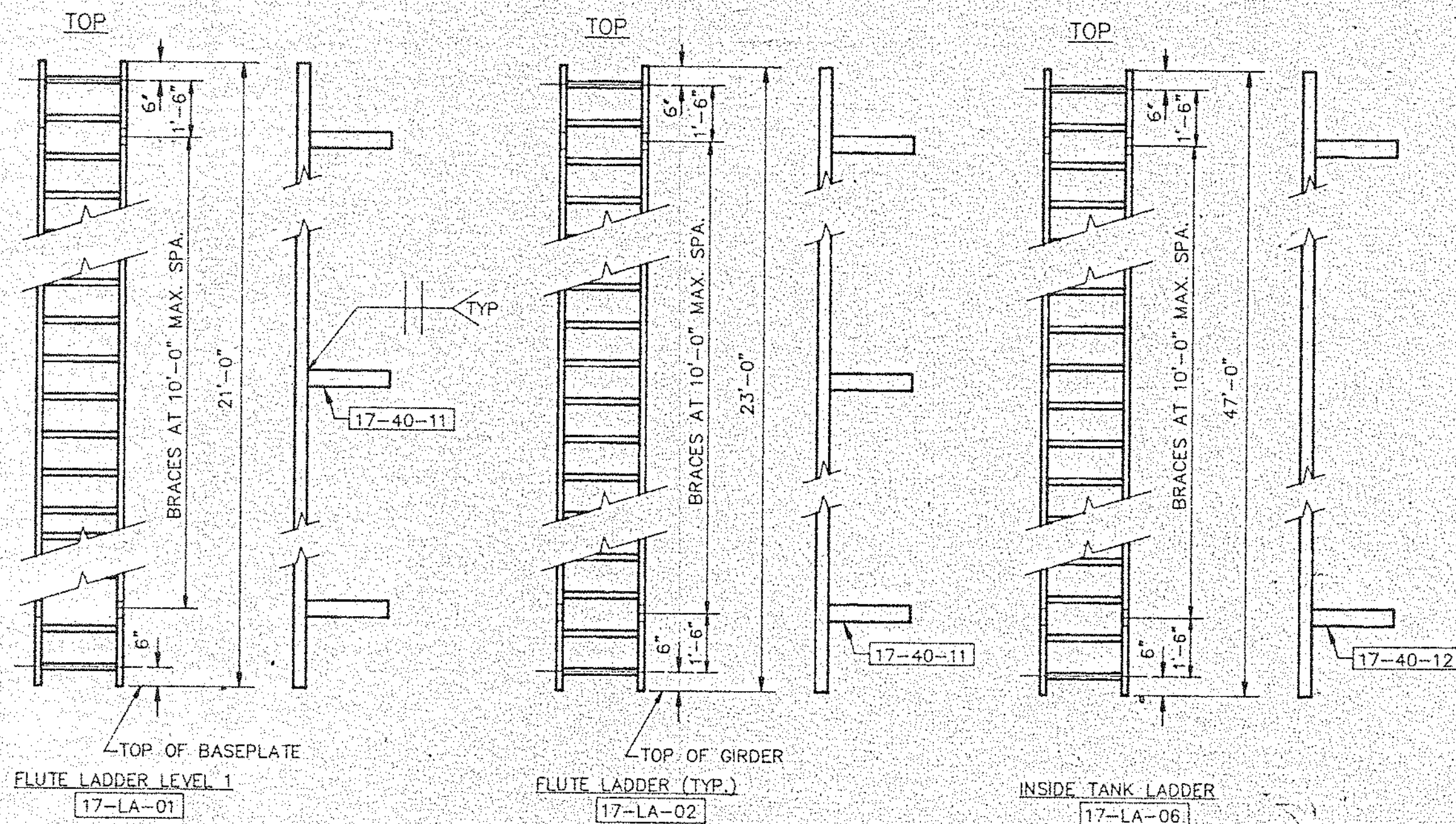
NOTES:
SEE DWG. E-3510 17 FOR LADDER DETAILS
SEE DWG. E-3510 12 & 13 FOR GIRDER DETAILS
SEE DWG. E-3510 24 FOR MANHOLE DETAILS

D-13500-016-A

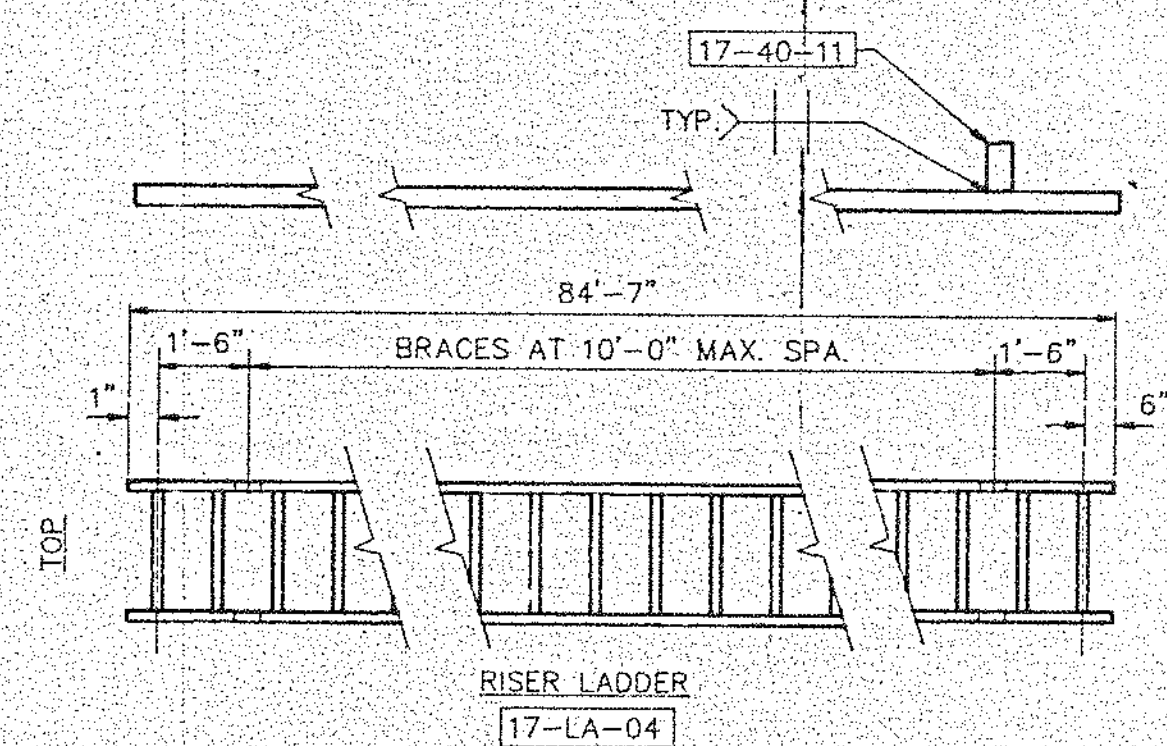
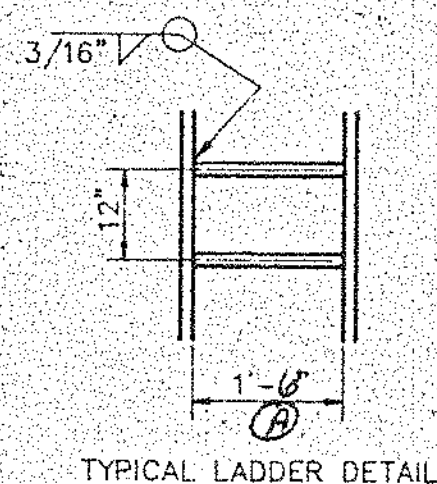
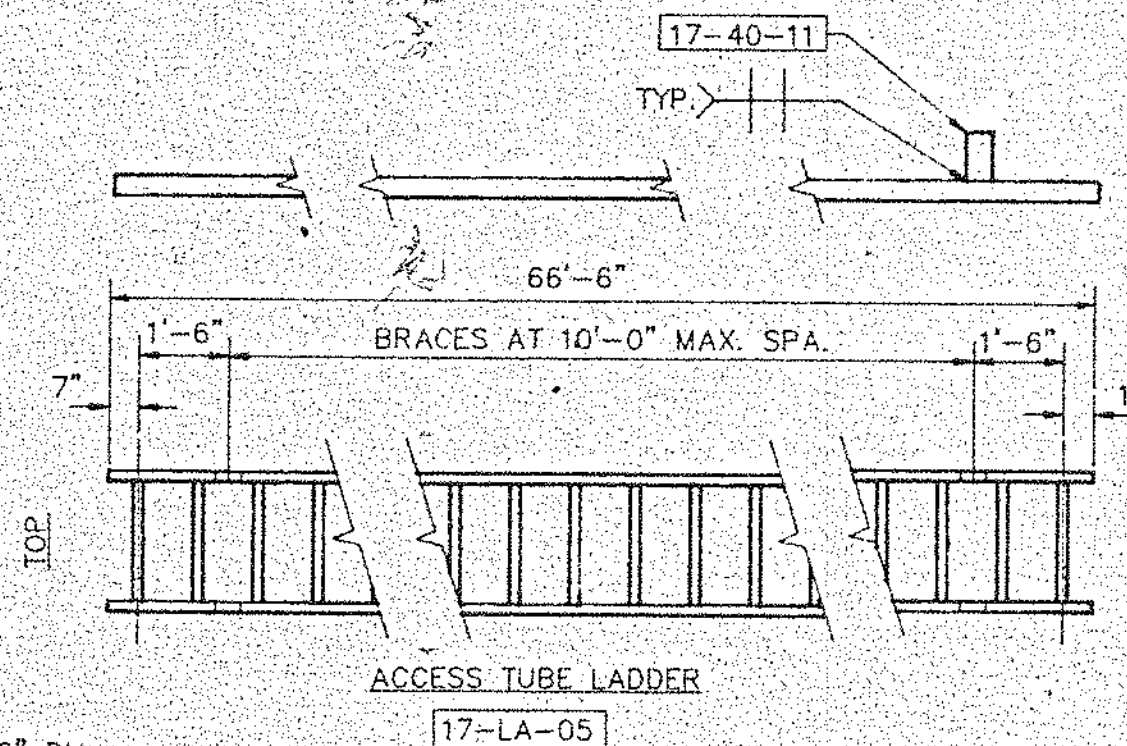
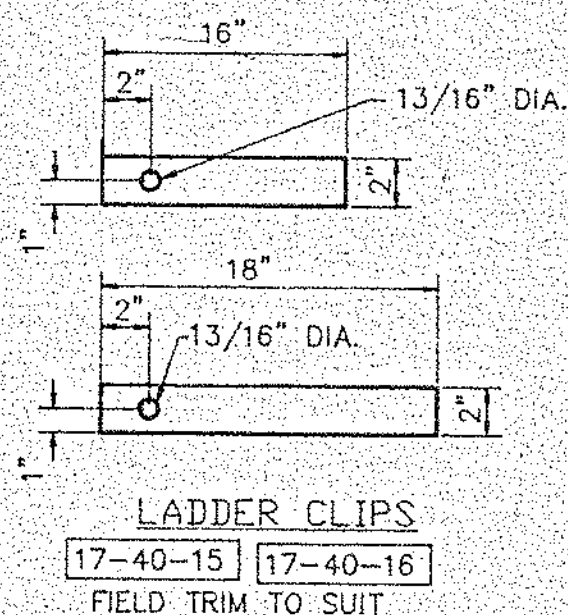
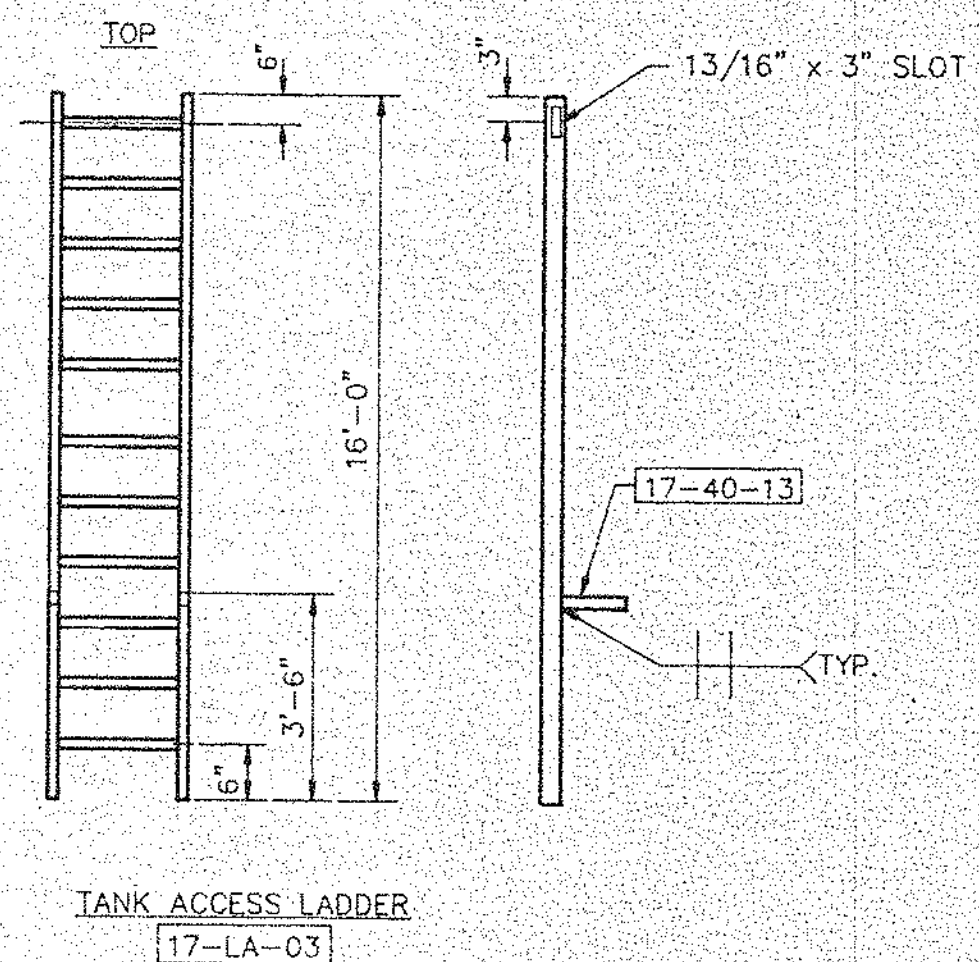
REV.	BY	DATE	REMARKS
A	RPM	8-3	AS NOTED
CALDWELL TANKS, INC. LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY	RPM	8-3	TITLE: LADDER ELEVATION
DATE	2-10-93	DRAWING NO.	E-3510

ALL TANKS AND TOWER DETAILS
WAS DESIGNED, CHECKED
AND APPROVED FOR CONSTRUCTION
IN ACCORDANCE WITH THE
REQUIREMENTS OF THE
APPLICABLE CODES AND
SPECIFICATIONS.

AS BUILT DRAWING



SUB ASSY NO	PART NO	QTY	DESCRIPTION	MATERIAL	WT/PC	TOTAL WT
17-LA-01	17-40-01	1	FLUTE LADDER (LEVEL 1)			150
	17-35-01	21	STRINGER	2" X 3/8" X 316SS BAR X 21'-0" LG.		
	17-40-11	6	LADDER RUNGS	3/4" ROUND 316SS BAR X 1'-6" LG.		
	17-40-11	6	BRACE	2" X 3/8" CARBON STL. BAR X 6" LG.		
17-LA-02	17-40-02	5	FLUTE LADDER (TYP.)			165
	17-40-02	2	STRINGER	2" X 3/8" 316SS BAR X 23'-0" LG.		
	17-35-01	23	RUNG	3/4" ROUND 316SS BAR X 1'-6" LG.		
	17-40-11	6	BRACE	2" X 3/8" CARBON STL. BAR X 6" LG.		
17-LA-03	17-40-03	1	TANK ACCESS LADDER			115
	17-40-03	2	STRINGER	2" X 3/8" 316SS BAR X 16'-0" LG.		
	17-35-01	16	RUNG	3/4" ROUND 316SS BAR X 1'-6" LG.		
	17-40-13	2	BRACE	2" X 3/8" CARBON STL. BAR X 7" LG.		
17-LA-04	17-40-04	1	RISER LADDER	(TEMP. - SHIP W/ RISER)		600
	17-40-04	2	STRINGER	2" X 3/8" C.S. BAR X 84'-7" LG.		
	17-35-01	85	RUNG	3/4" ROUND C.S. BAR X 1'-4" LG.		
	17-40-11	18	BRACE	2" X 3/8" CARBON STL. BAR X 6" LG.		
17-LA-05	17-40-05	1	ACCESS TUBE LADDER	(SHIP W/ ACCESS TUBE)		470
	17-40-05	2	STRINGER	2" X 3/8" 316SS BAR X 66'-6" LG.		
	17-35-01	66	RUNG	3/4" ROUND 316SS BAR X 1'-6" LG.		
	17-40-11	14	BRACE	2" X 3/8" CARBON STL. BAR X 6" LG.		
17-LA-06	17-40-06	1	INSIDE TANK LADDER			340
	17-40-06	2	STRINGER	2" X 3/8" 316SS BAR X 47'-0" LG.		
	17-35-01	47	RUNG	3/4" ROUND 316SS BAR X 1'-6" LG.		
	17-40-12	10	BRACE	2" X 3/8" CARBON STL. BAR X 8" LG.		
ALL ITEMS LISTED BELOW ARE SHIPPED LOOSE						
	17-40-15	1	LADDER CLIP	2" X 3/8" X 16" LG.		
	17-40-16	1	LADDER CLIP	2" X 3/8" X 18" LG.		
	17-86-01	2	LADDER CLIP BOLT	3/4" X 2" LG. ZINC PL. BOLT		
	17-70-01	2	BELT	NYLON & LEATHER		
	17-70-02	2	SLEEVE	CAST BRONZE		
	17-70-03	2	LANYARD			
	17-70-04	21	LIN. FT. RAIL (17-LA-01)	STAINLESS STEEL		
	17-70-05	115	LIN. FT. RAIL (17-LA-02)	STAINLESS STEEL		
	17-70-06	16	LIN. FT. RAIL (17-LA-03)	STAINLESS STEEL		
	17-70-07	66	LIN. FT. RAIL (17-LA-05)	STAINLESS STEEL		
	17-70-08	47	LIN. FT. RAIL (17-LA-06)	STAINLESS STEEL		
	17-70-09	61	RUNG CLAMPS	STAINLESS STEEL		
	17-90-01	12	E-309 WELDING RODS			



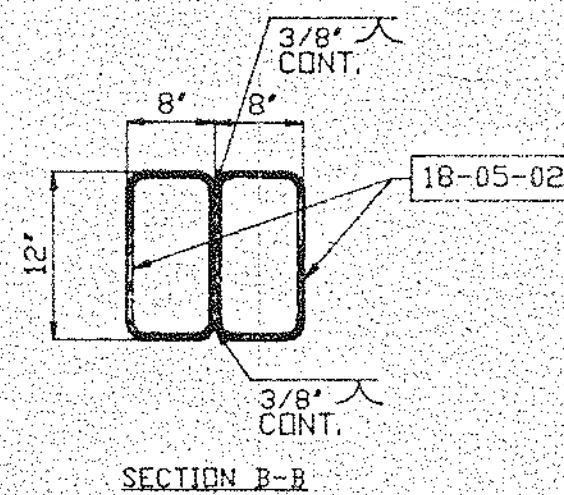
NOTE: ALL LADDERS SHALL BE EQUIPPED WITH RAIL TYPE SAFE CLIMBING DEVICE
D-13500-017-A

(N) ALL LADDERS STAINLESS STEEL
ALL LADDERS 18" WIDE (A)

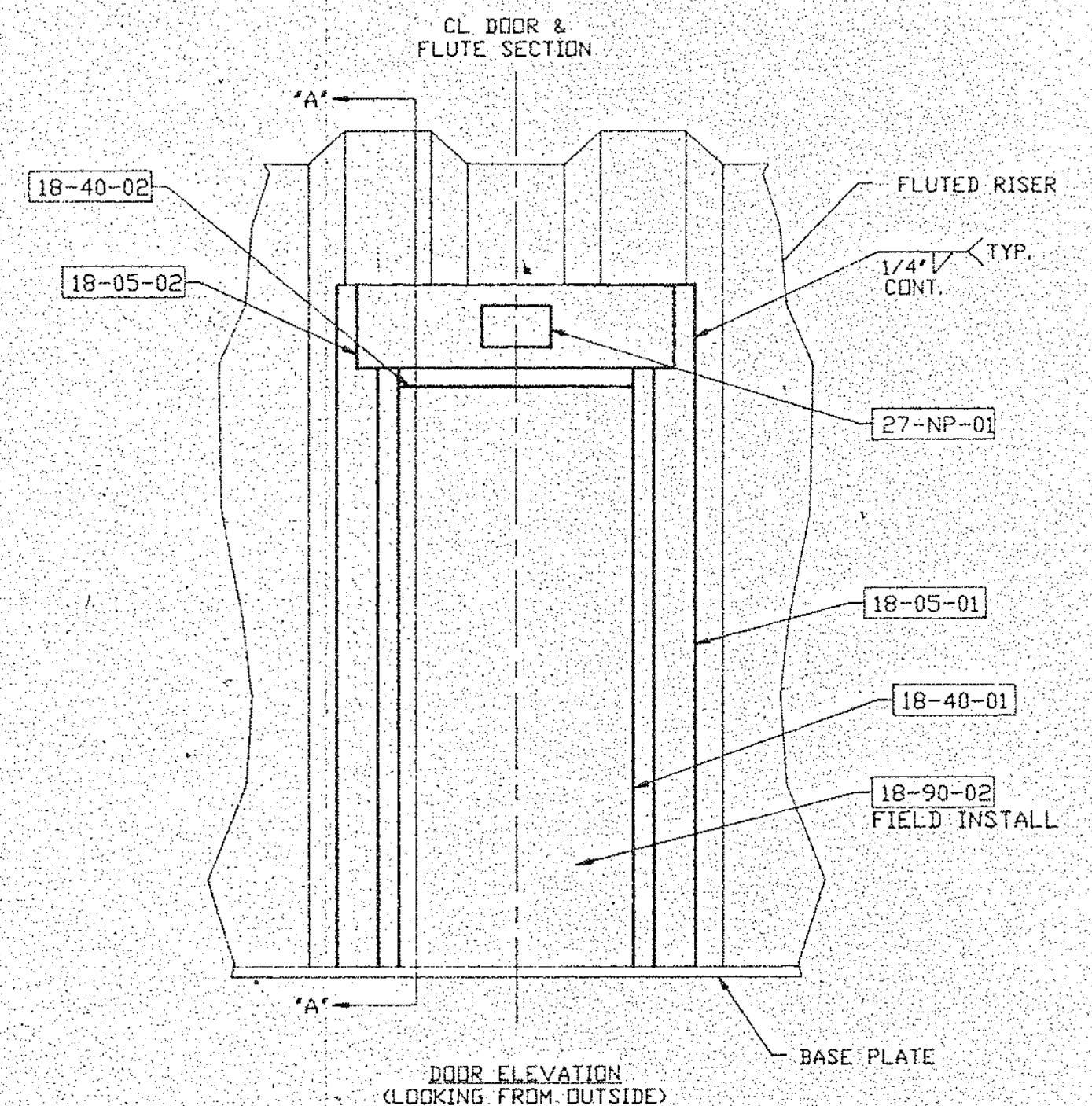
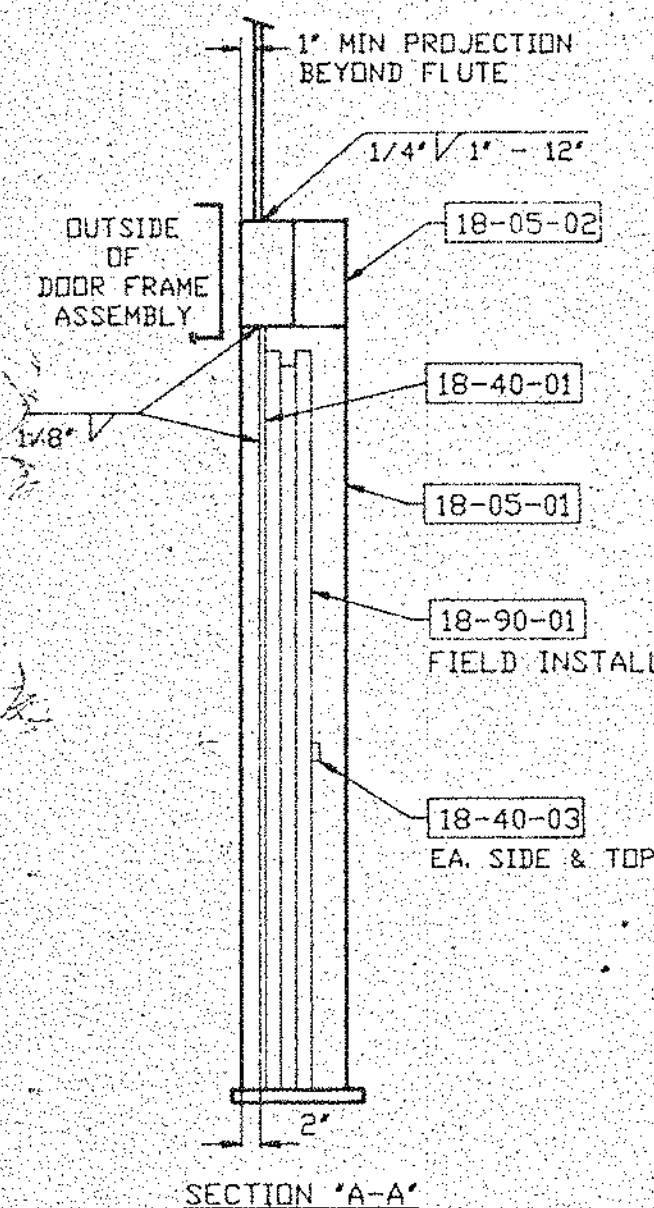
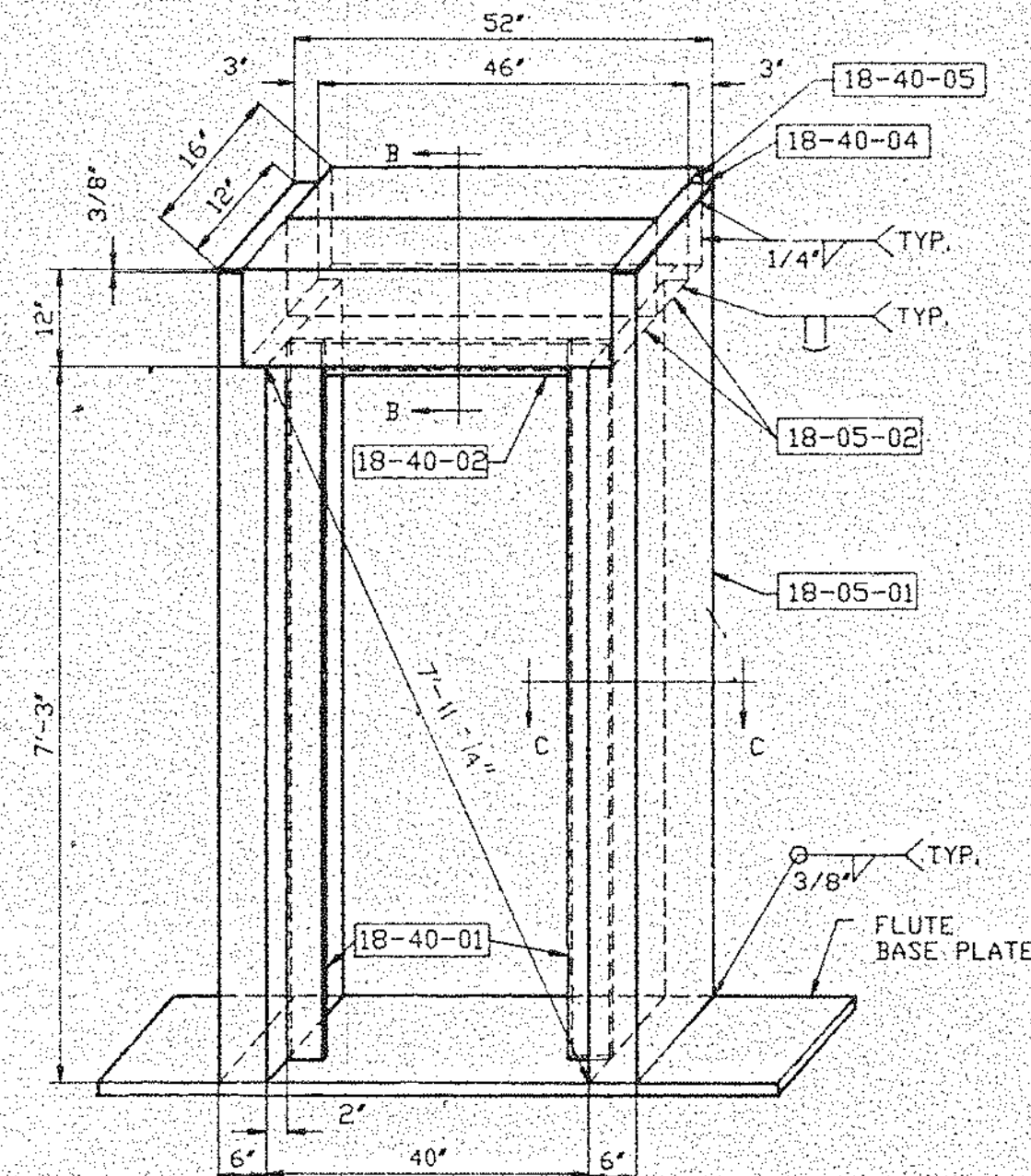
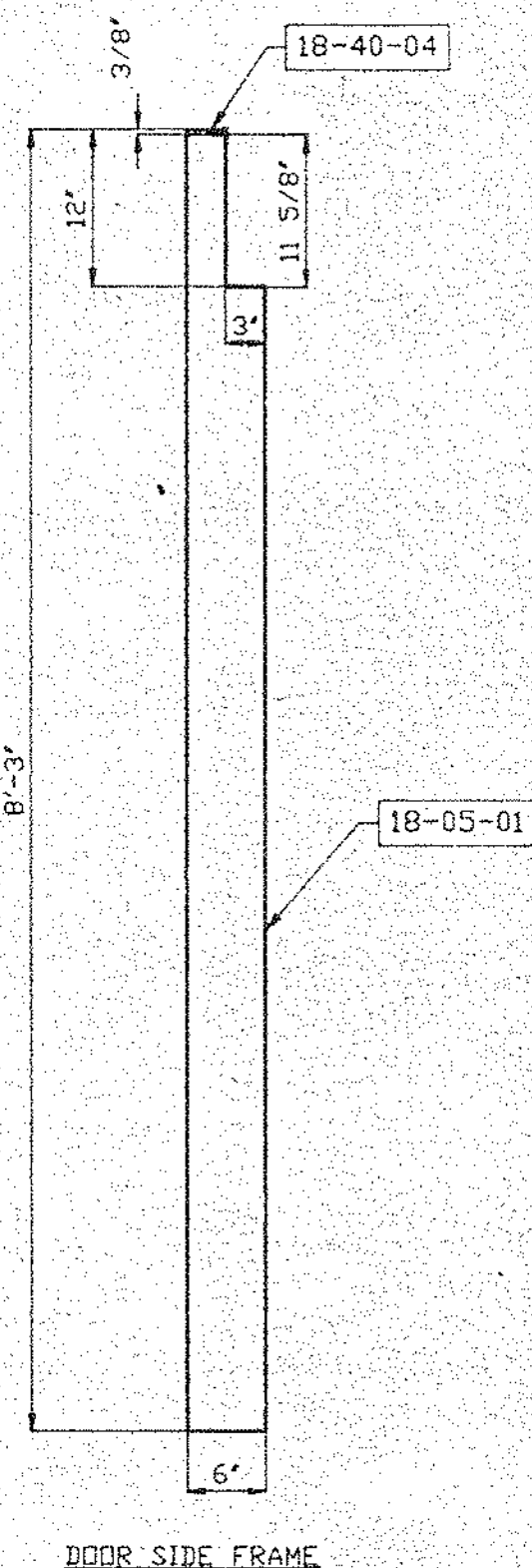
(A) NOTE:
C.S. denotes
Carbon steel

REV.	BY:	DATE	REMARKS
A	RPM/5-19	AS NOTED	JK
CALDWELL TANKS, INC. LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM/5-19	TITLE:	LADDER DETAILS
DATE:	2-10-93	DRAWING NO.:	E-3510

AS BUILT DRAWING



BILL OF MATERIAL					
SUB-ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	PC. WT.
18-DA-01		1	PEDESTRIAN DOOR REINFORCEMENT	(INSTALL DN 04-BF-01)	1139
	18-05-01	2	DOOR SIDE FRAME	12" x 6" x 3/8" WL. x 8'-2 5/8" LG.	360
	18-05-02	2	TOP BEAMS	12" x 8" x 3/8" WL. x 3'-10" LG.	185
	18-40-01	2	FRAME BARS	1 3/4" x 1/4" x 7'-3" LG.	11
	18-40-02	1	FRAME BARS	1 3/4" x 1/4" x 36 1/2" LG.	5
	18-40-04	2	COVER PLATES	3" x 3/8" x 16" LG.	5
	18-40-05	2	COVER PLATES	4" x 3/8" x 12" LG.	6
	27-NP-01	1	NAMEPLATE ASSY.	SEE DWG. 27	
ITEMS LISTED BELOW ARE SHIPPED LOOSE					
	18-40-03	3	FRAME BARS	2" x 1/4" x 8" LG.	
(N)	18-90-01	1	ALUMINUM DOOR FRAME	FOR 36" x 84" ALUMINUM DOOR	
	18-90-02	1	PEDESTRIAN DOOR	36" x 84" ALUMINUM DOOR (B)	



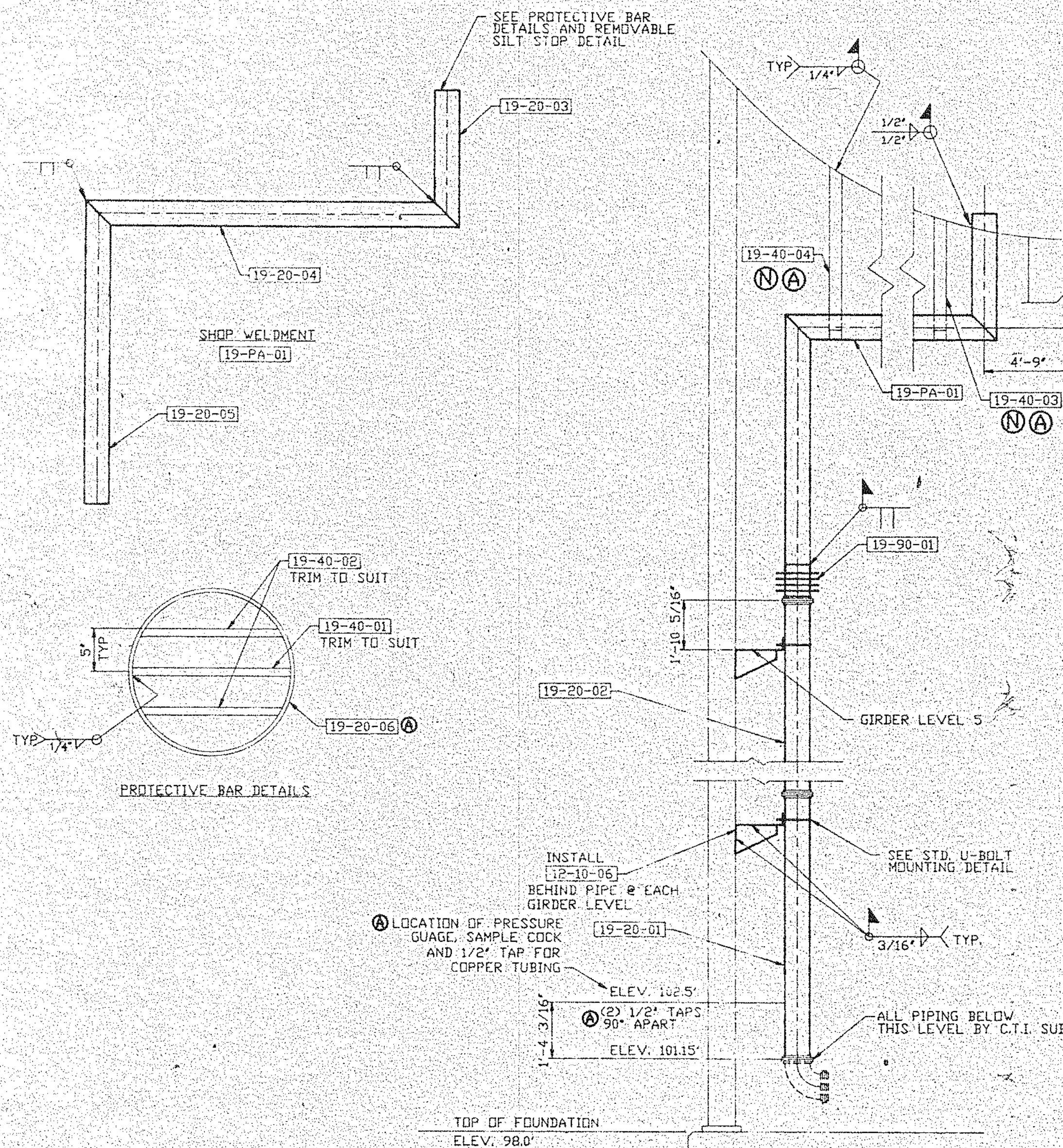
- NOTES:
1. 36" x 84" ALUMINUM DOOR AND FRAME SHALL BE BOLTED TO REINFORCING FRAME. ISOLATING MATERIAL SHALL BE PROVIDED AT STEEL AND ALUMINUM INTERFACE.
 2. SEE DRAWING E-3510.02 FOR ORIENTATION.

C	RPM	2-14	AS NOTED
B	RPM	6-12	AS NOTED
A	RPM	5-24	AS NOTED. JER
REV.	BY	DATE	REMARKS
CALDWELL TANKS, INC.			
LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	JER	TITLE: PEDESTRIAN DOOR
DATE:	5-24-93		DRAWING NO. E-3510

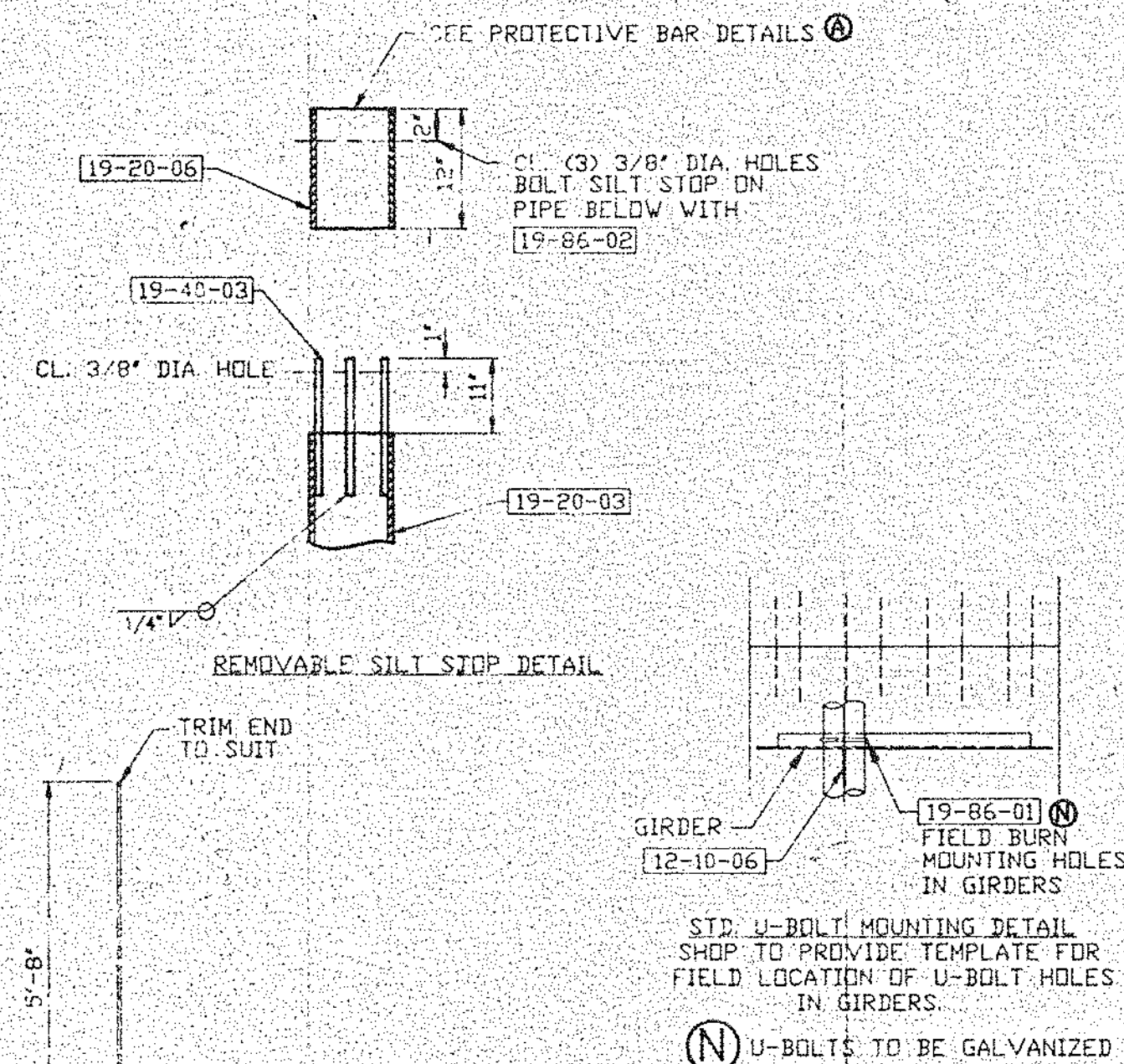
Caldwell Tanks hereby certifies that it has reviewed, checked and approved this shop drawing and it is in conformance with the requirements of the contract documents.

Date: _____ By: _____

AS BUILT DRAWING



SUB-ASSY. NO	PART NO.	QTY	DESCRIPTION	MATERIAL	P.C. WT.	TOTAL
19-PA-01		1	INLET PIPE ASSY.			2590
	19-20-03	1	STEEL PIPE	20" EX. HEAVY PIPE X 4'-0" LG.	315	
	19-20-04	1	STEEL PIPE	20" STD. WT. X 17'-7 7/8" LG. ON CL.	1390	
	19-20-05	1	STEEL PIPE	20" STD. WT. X 11'-2 7/16" LG. ON CL.	885	
19-RS-01	19-40-03	3	SILT STOP BARS	2" X 1/4" BARS X 18' LG.		
		1	SILT STOP ASSY.			
	19-20-06	1	SILT STOP PIPE	20" STD. WT. X 12' LG.		
	19-40-01	1	PROTECTIVE BARS	2" X 1/4" BAR X 19' LG.		
	19-40-02	2	PROTECTIVE BARS	2" X 1/4" BARS X 16' LG.		
ITEMS LISTED BELOW ARE SHIPPED SEPARATELY						
	19-20-01	1	DUCTILE IRON PIPE	20" DIA. X 17'-6" LG. SECT. FLGD. w/1/2" TAPS	1875	
	19-20-02	4	DUCTILE IRON PIPE	20" DIA. X 17'-6" LG. SECT. FLGD. BOTH ENDS	1875	7500
	19-90-01	1	STD. EXPANSION JOINT	20" 150# BELLOWS-TYPE (F.E. X P.E.)		
	19-86-01	5	U-BOLTS FOR 20" DI. PIPE	GALVANIZED		
	19-90-03	6	RED RUBBER GASKET	2 1/2" DIA. X 1/8" THK.		
	19-86-03	120	DI. PIPE BOLTS	1 1/8" DIA. X 6" LG. M. BOLTS		
	19-86-02	3	SILT STOP BOLTS	1/4" DIA. X 2" LG. M. BOLTS		
	19-40-05	1	PIPE BRACE	6" X 3/8" BAR X 5'-4" LG.		
	19-40-04	1	PIPE BRACE	6" X 3/8" BAR X 7'-3" LG.		



NOTE:

- SEE DRAWING E-3510 02 AND E-3510 03 FOR ORIENTATION OF PIPING.
- SEE DRAWING E-3510 29 FOR PRESSURE GAUGE AND SAMPLE COCK DETAILS.

① LOCATION OF PRESSURE GAUGE, SAMPLE COCK AND 1/2" TAP FOR COPPER TUBING

REV.	BY:	DATE	REMARKS
C	RPM	6-11	AS NOTED
B	RPM	6-9	AS NOTED
A	RPM	6-2	AS NOTED

CALDWELL TANKS, INC.
LOUISVILLE, KY.

FAYETTEVILLE, NORTH CAROLINA

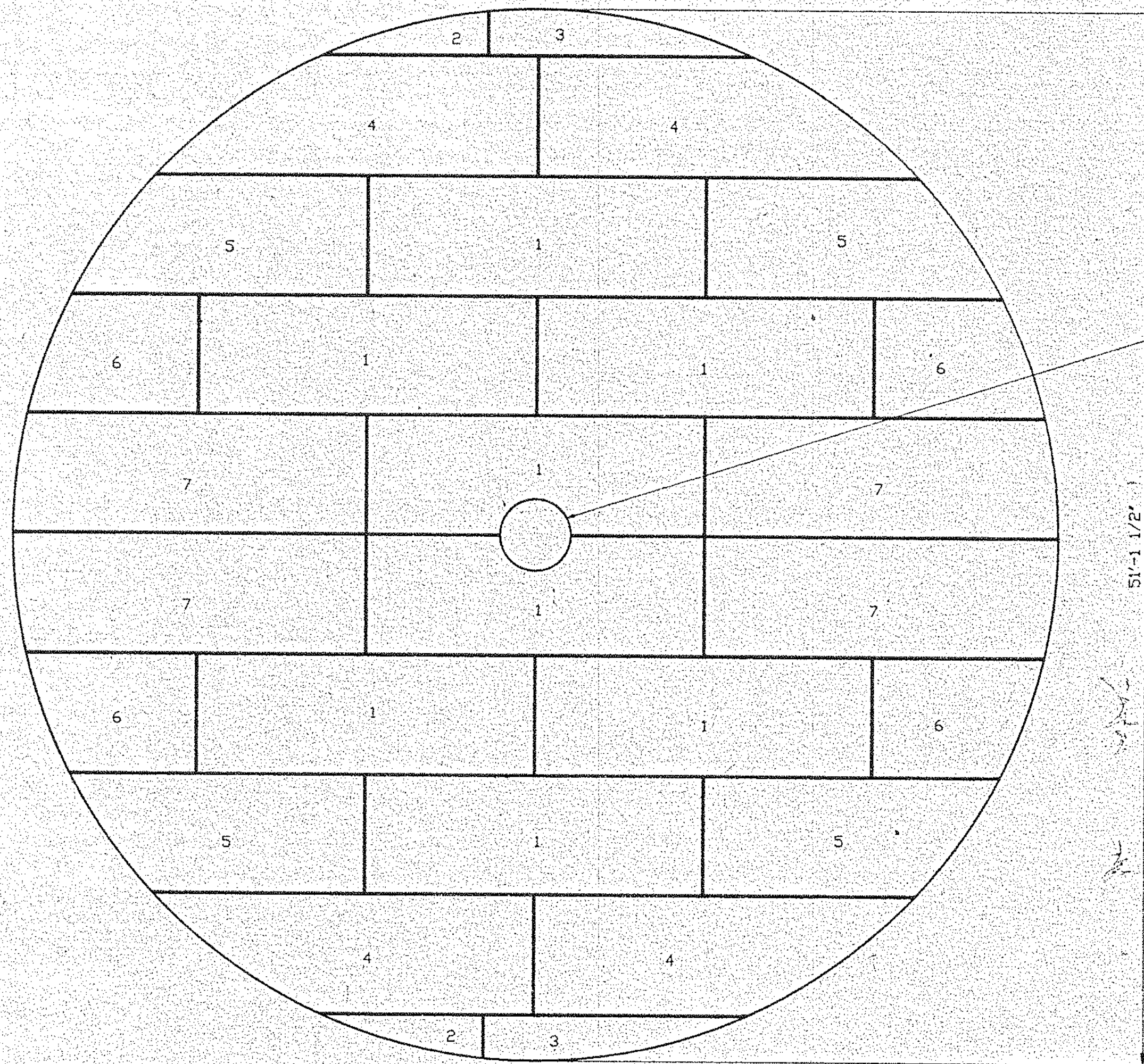
BY: *RPM/ger* TITLE: INLET PIPING DETAILS

DATE: 2-11-93 DRAWING NO.: E-3510 19

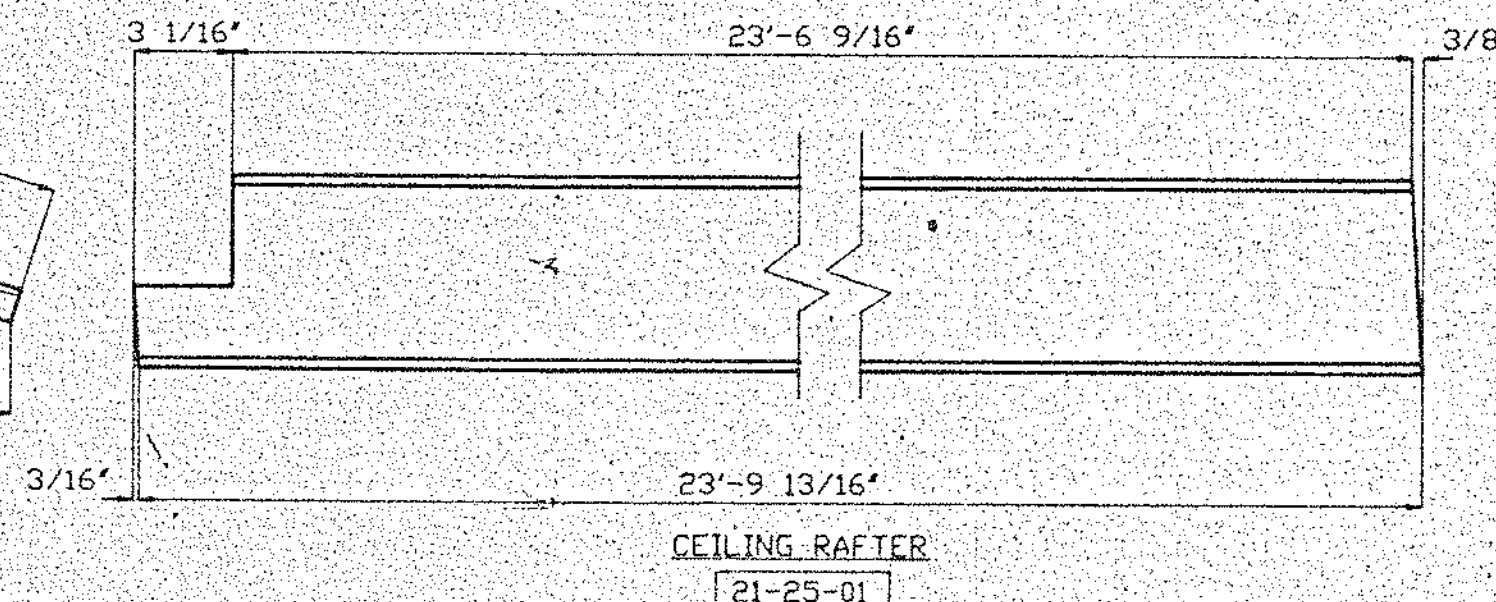
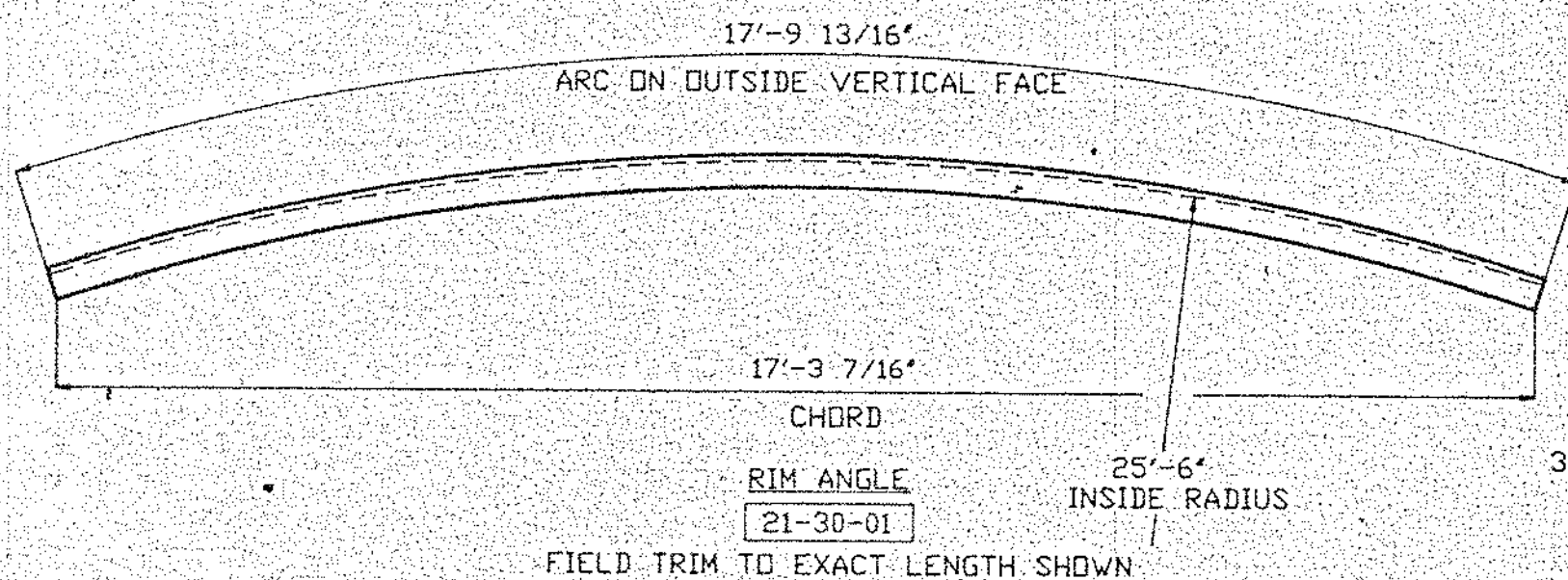
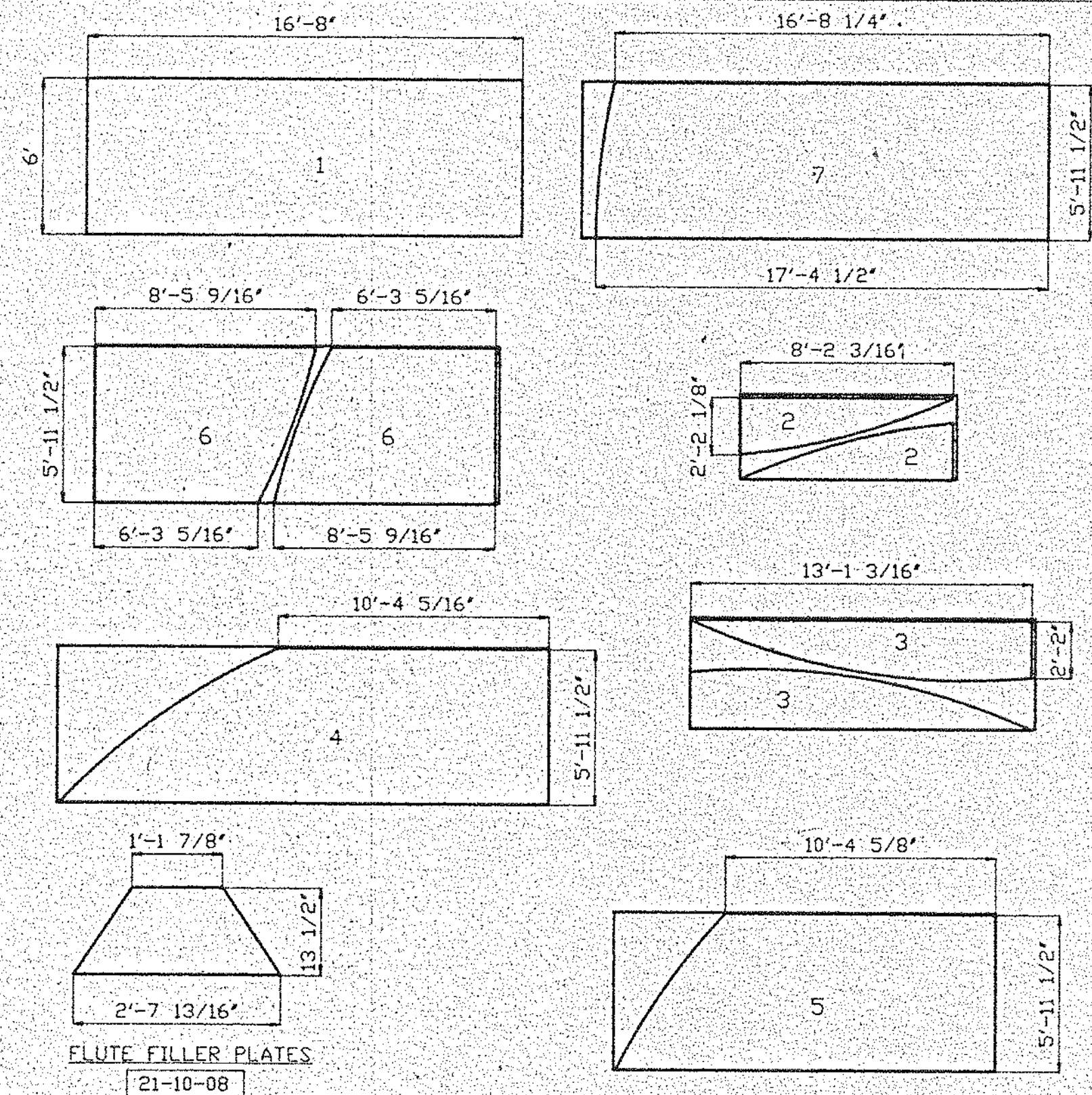
Caldwell Tanks hereby certifies that it has reviewed, checked and approved this drawing and it is in accordance with the requirements of the contract documents.

Date: _____ By: _____

AS BUILT DRAWING



BILL OF MATERIAL						
SUB-ASSY NO	PART NO	QTY	DESCRIPTION	MAT'L REQ'D.	PC. WT.	TOT. WT.
	21-10-01	8	CEILING PLATE #1	(8) 72" x 1/4" x 200"	1025	8200
	21-10-02	4	CEILING PLATE #7	(4) 72" x 1/4" x 215"	1045	4180
	21-10-03	4	CEILING PLATE #6	(2) 72" x 1/4" x 186"	460	1840
	21-10-04	4	CEILING PLATE #5	(4) 72" x 1/4" x 176"	775	3100
	21-10-05	4	CEILING PLATE #4	(4) 72" x 1/4" x 226"	925	3700
	21-10-06	2	CEILING PLATE #3	(1) 51" x 1/4" x 179"	225	450
	21-10-07	2	CEILING PLATE #2	(1) 39" x 1/4" x 100"	115	230
	21-30-01	9	RIM ANGLE	3" x 3" x 1/4" ANGLE x 19'-6" LG.	100	900
	21-25-01	22	CEILING RAFTERS	C6" x 8.2# x 23'-10" LG.	205	4510
	21-10-08	43	FILLER PLATE	(1) 83" x 1/4" x 199"	22	946
	21-20-01	2	PIPE SLEEVES	30" DIA. x 1/4" WL. x 2'-0" LG.	160	320



NOTE: SEE DWG. 21-A FOR ELEVATION VIEW OF CONDENSATE CEILING.

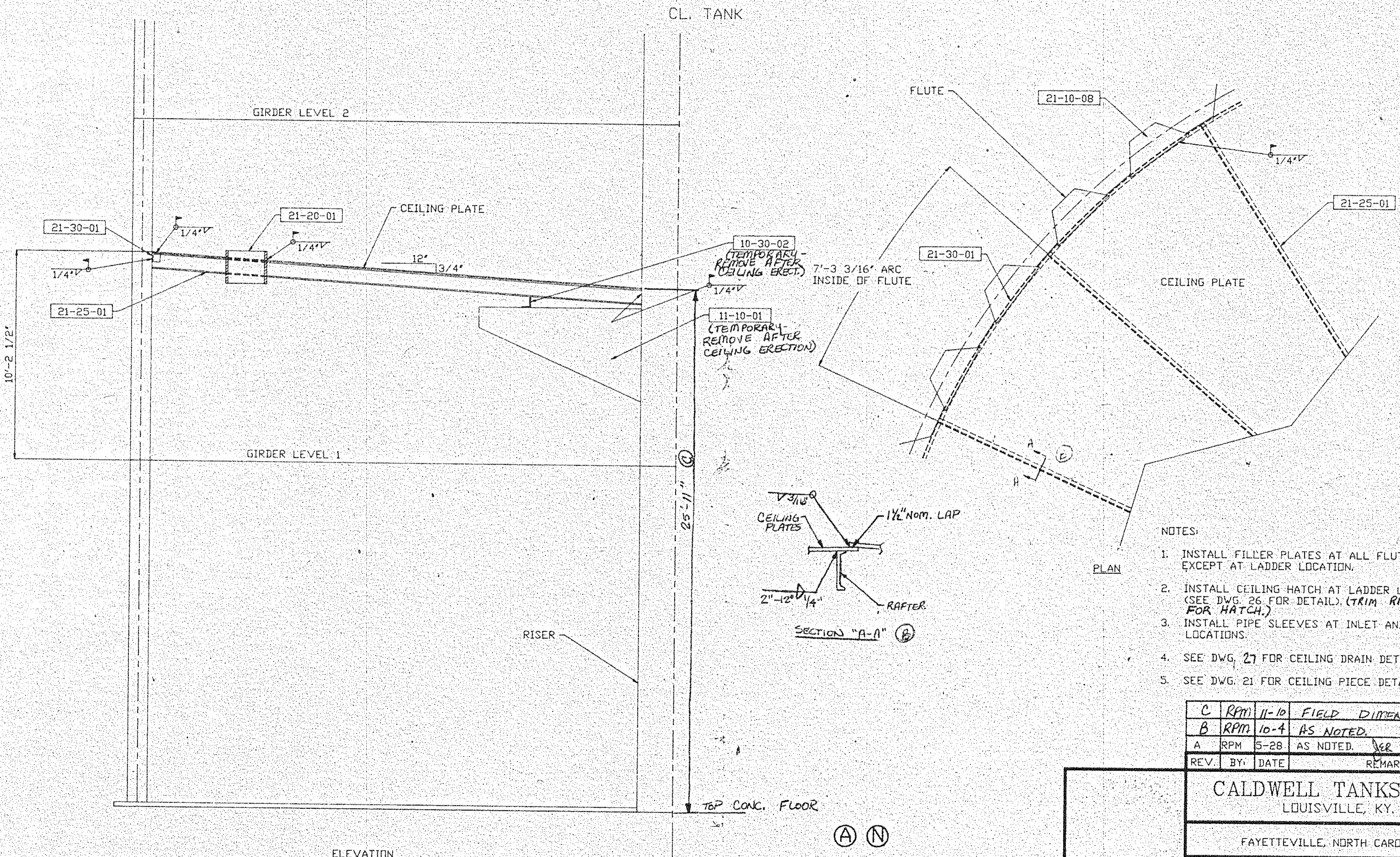
REV.	BY	DATE	REMARKS
A	RPM	5-28	AS NOTED. <i>REL</i>
Caldwell Tanks, Inc. Louisville, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	TITLE:	CONDENSATE CEILING
DATE:	2-17-93	DRAWING NO.:	E-3510

AN

Caldwell Tanks hereby certifies that, it has reviewed, checked and approved this shop drawing and it is in conformance with the requirements of the contract documents.

Date: _____ By: _____

AS BUILT DRAWING



- NOTES:
1. INSTALL FILLER PLATES AT ALL FLUTE LOCATIONS EXCEPT AT LADDER LOCATION.
 2. INSTALL CEILING HATCH AT LADDER LOCATION (SEE DWG. 26 FOR DETAIL). (TRIM RIM ANGLE FOR HATCH.)
 3. INSTALL PIPE SLEEVES AT INLET AND OVERFLOW LOCATIONS.
 4. SEE DWG. 27 FOR CEILING DRAIN DETAILS. (B)
 5. SEE DWG. 21 FOR CEILING PIECE DETAILS.

C	RPM	11-10	FIELD DIMENSION.
B	RPM	10-4	AS NOTED.
A	RPM	5-28	AS NOTED. <i>See</i>
REV.	BY	DATE	REMARKS
Caldwell Tanks, Inc. Louisville, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	<i>See</i>	TITLE: CONDENSATE CEILING
DATE:	5-28-93	DRAWING NO.:	E-3510 21-A

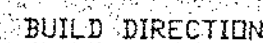
Caldwell Tanks, Inc. certifies that it has reviewed, checked and approved this drawing and it is in accordance with the requirements of the contract.

Date: _____ By: _____

AS BUILT DRAWING



ITEMS LISTED BELOW ARE SHIPPED SEPARATELY

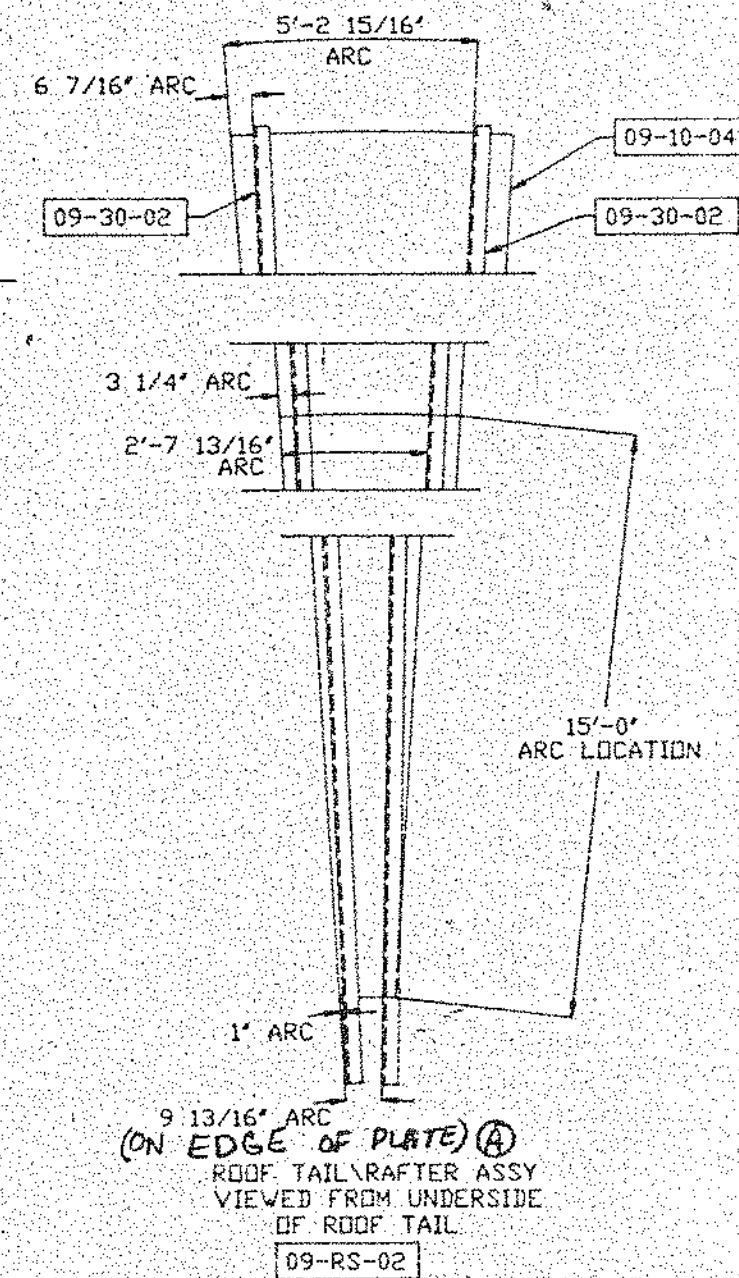
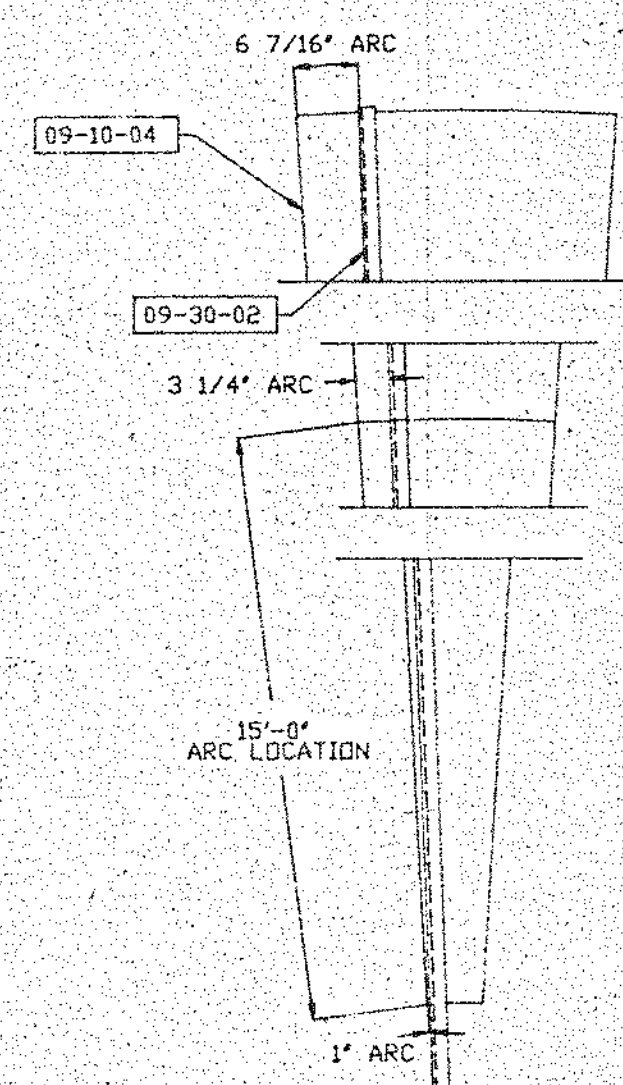
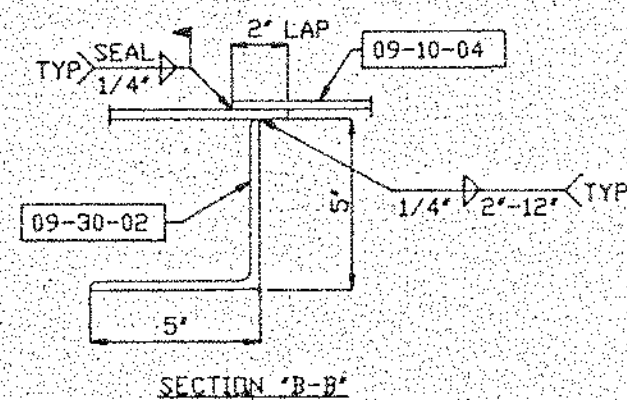
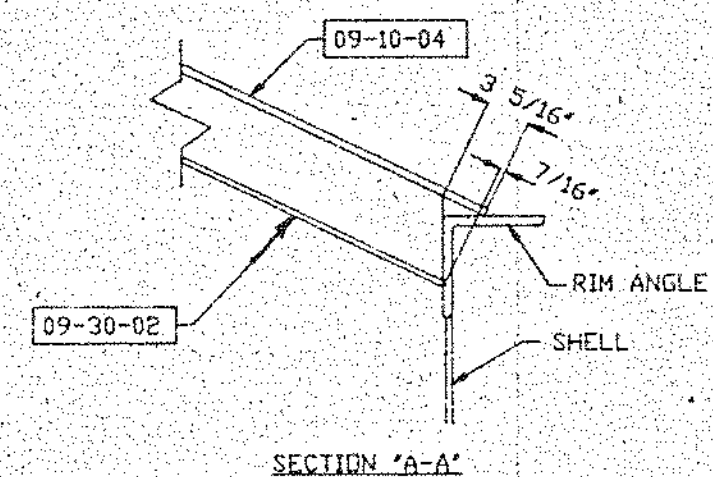
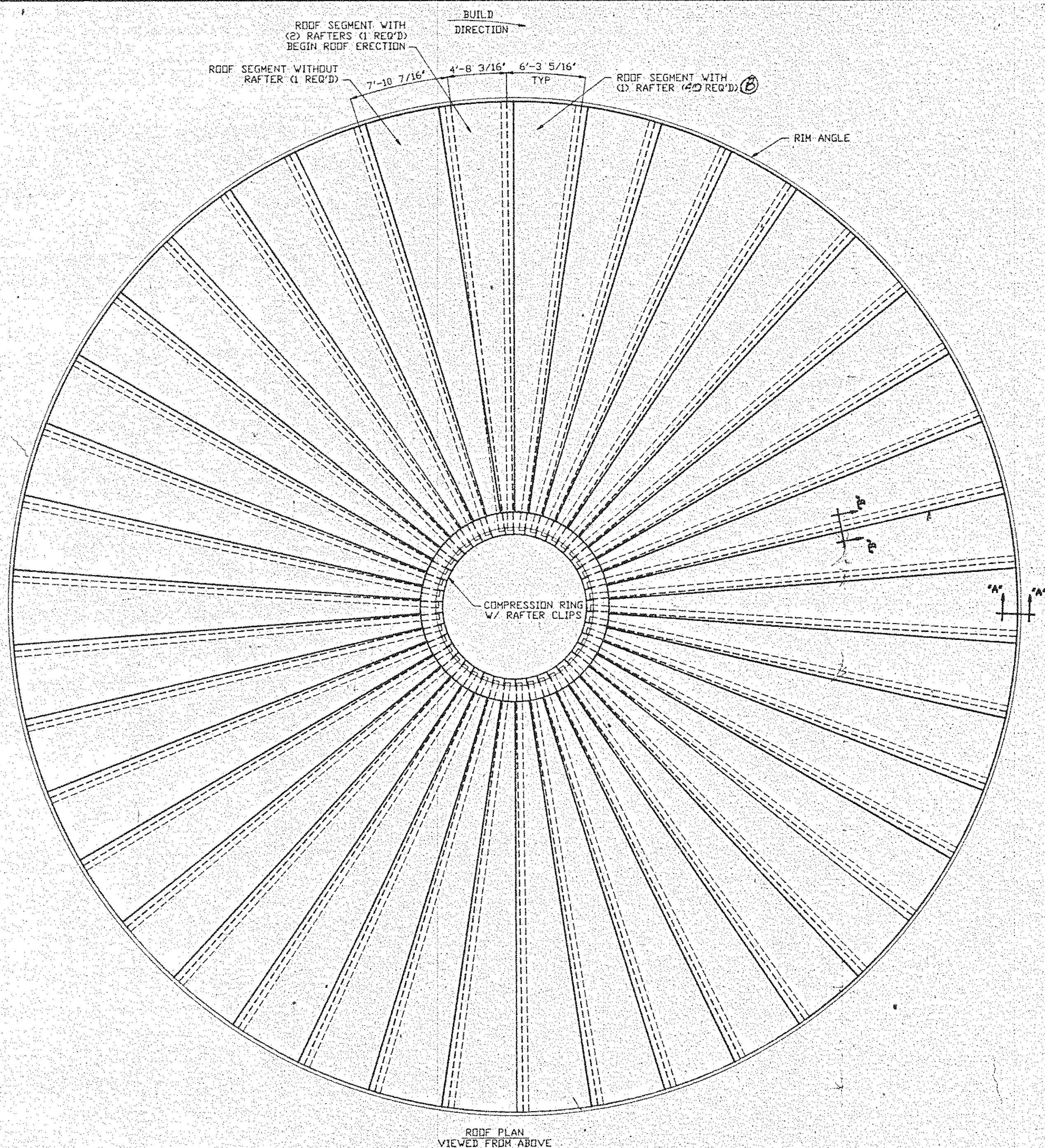


CALDWELL TANKS, INC.
LOUISVILLE, KY.

FAYETTEVILLE, NORTH CAROLINA

BY: RPM/jwr	TITLE: ROOF COMPRESSION RING
DATE: 2-23-93	DRAWING NO.: E-3510

AS BUILT DRAWING



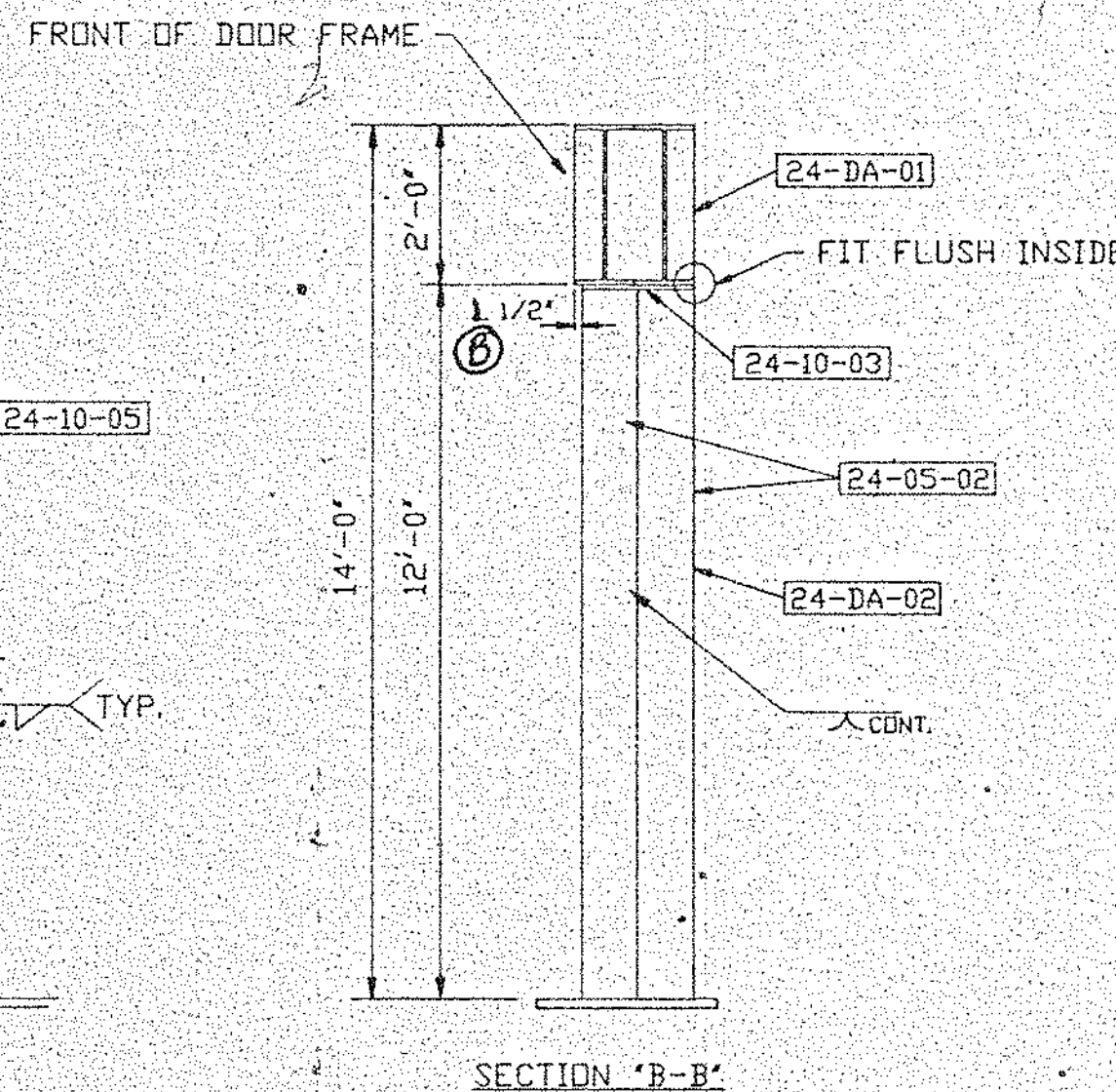
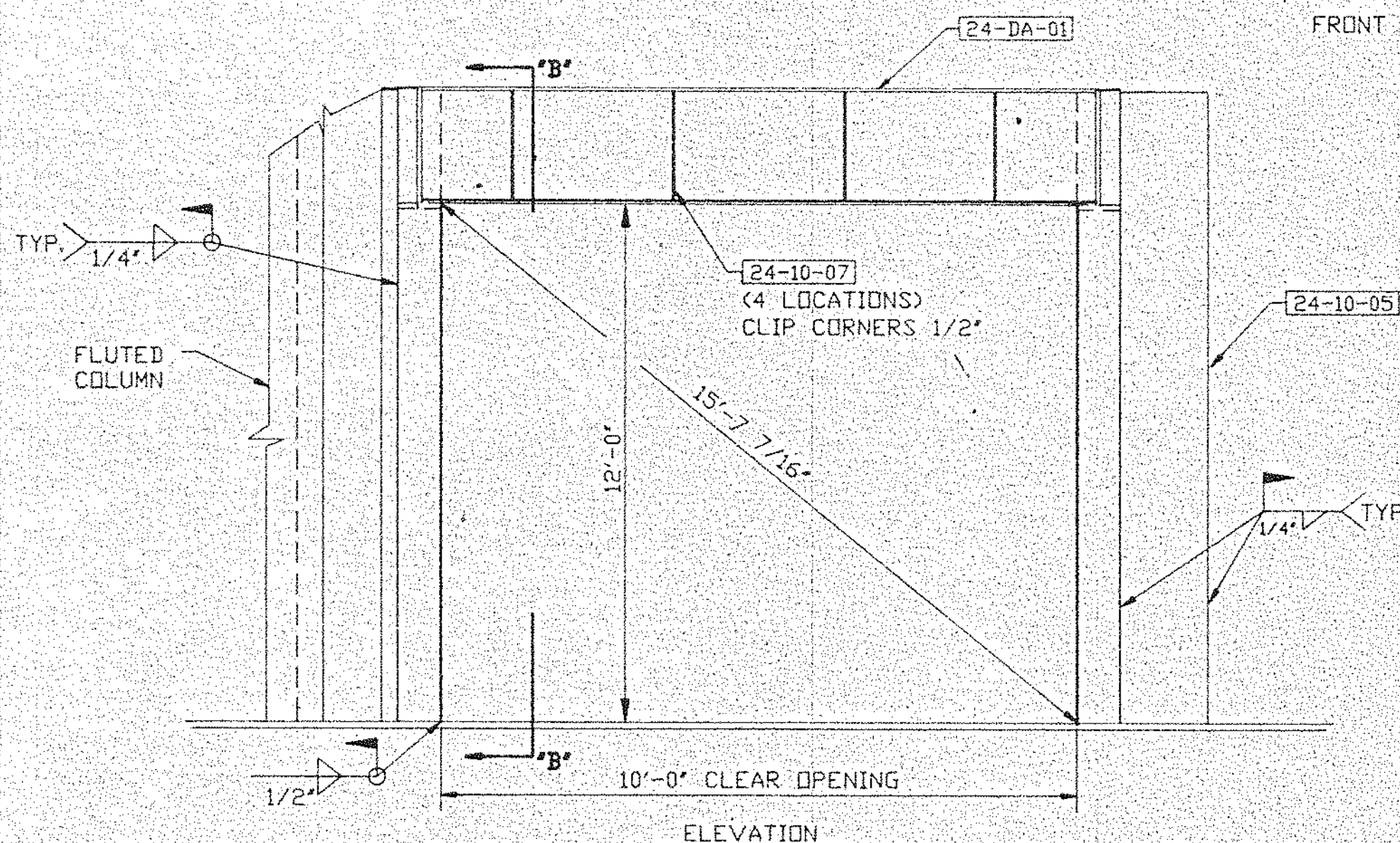
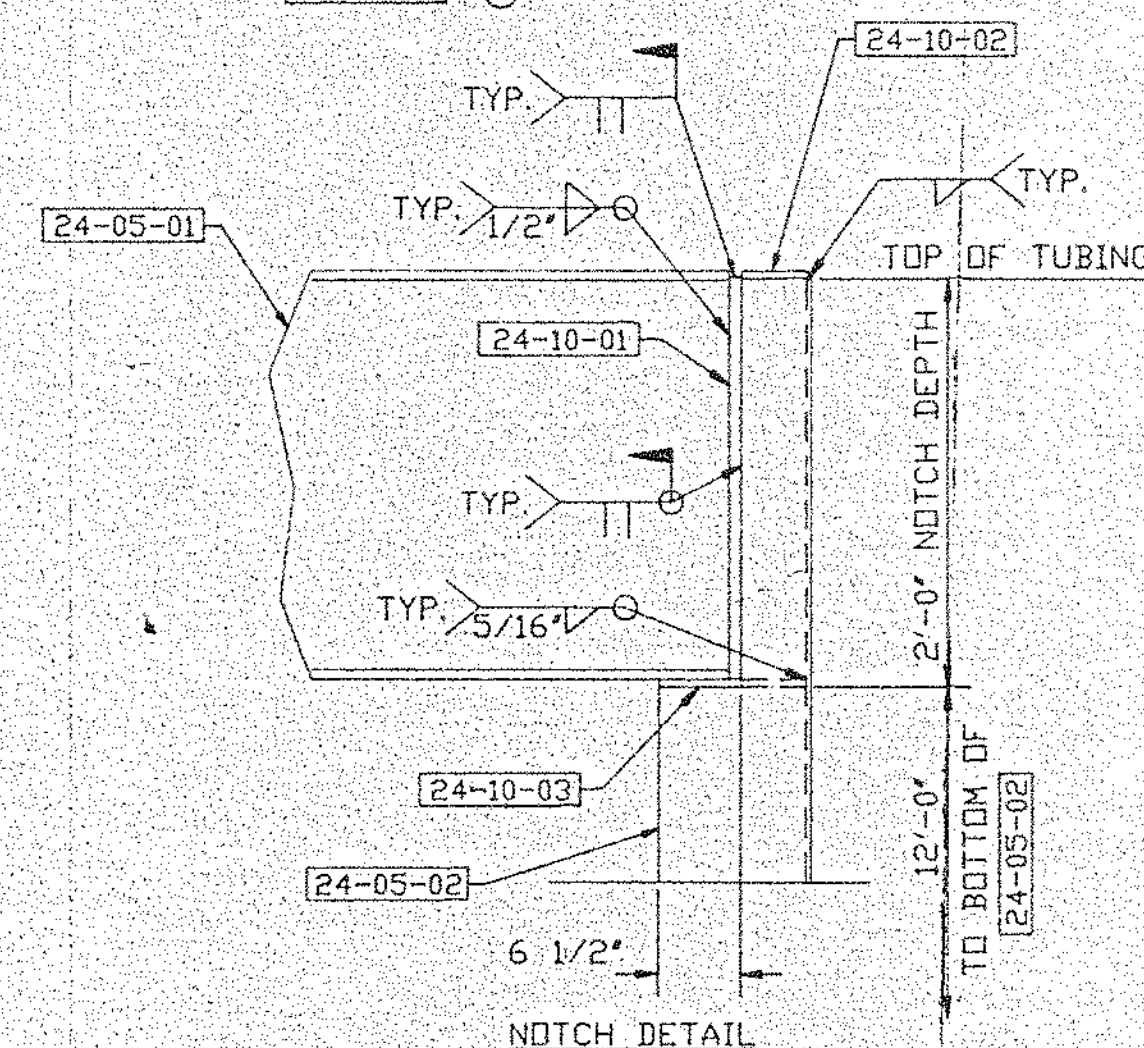
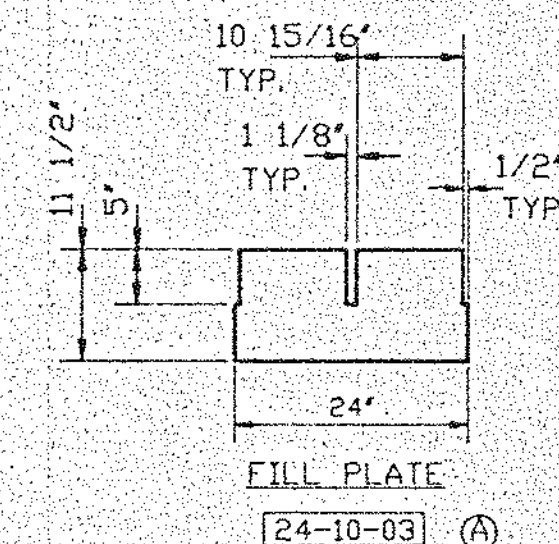
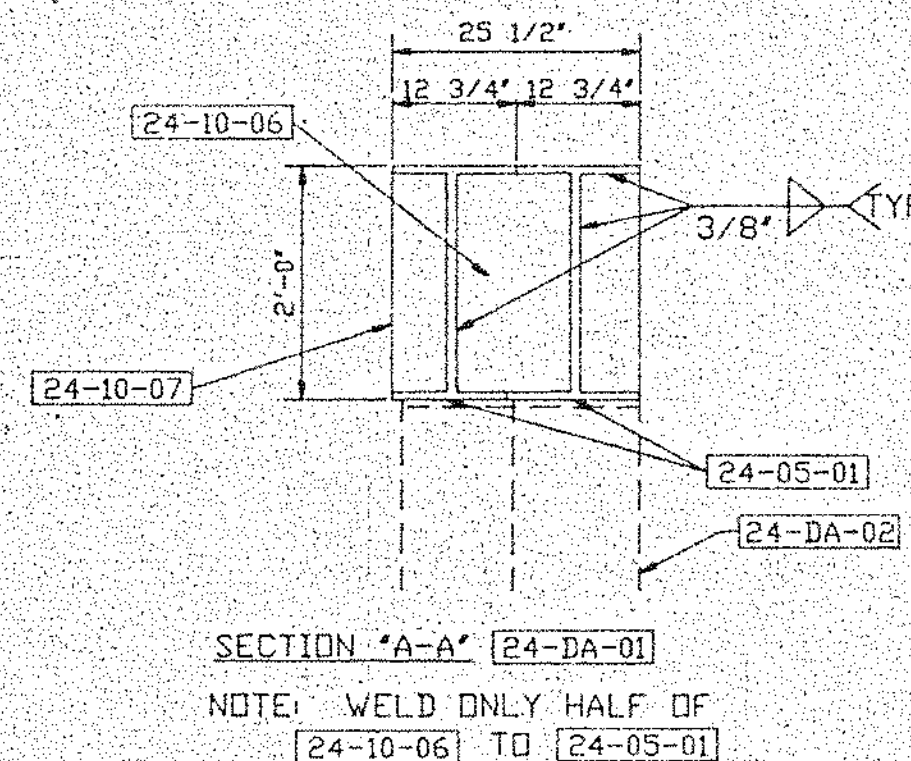
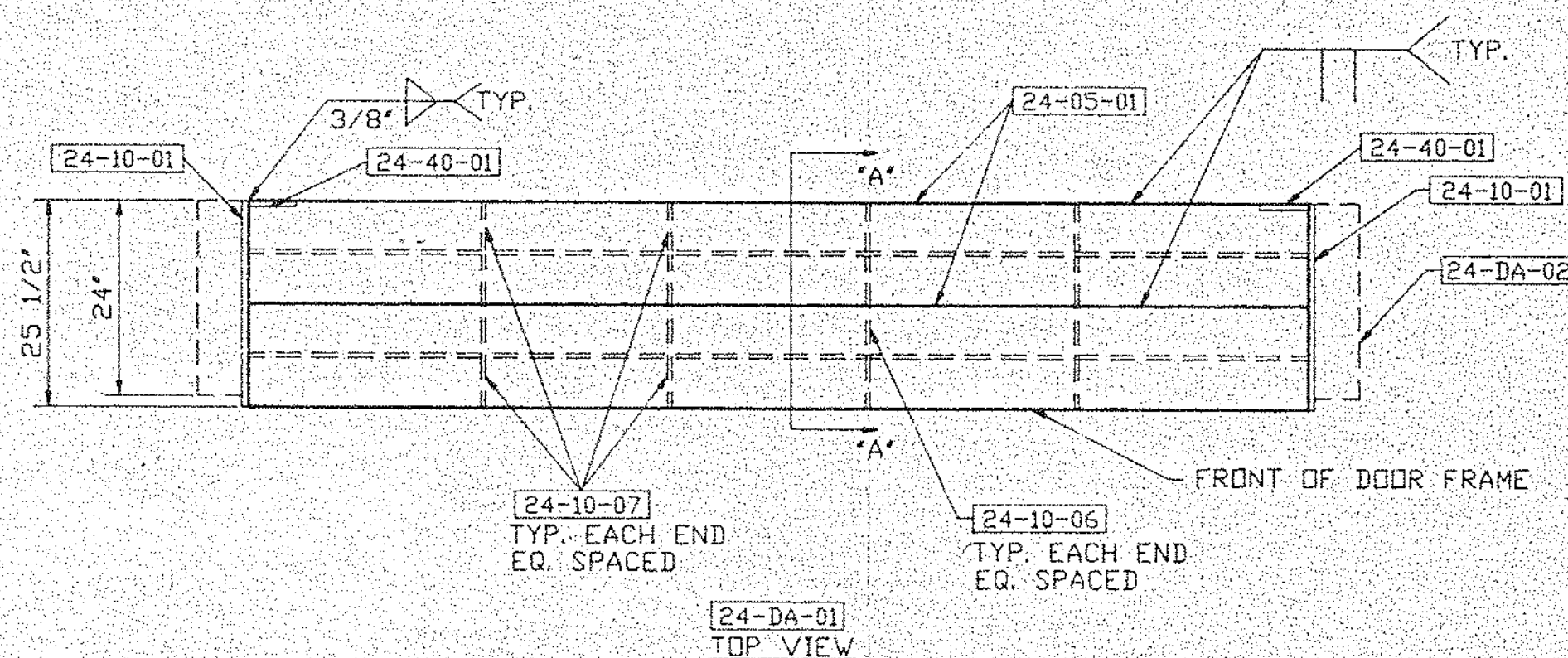
D-13500-023-A

REV.	BY:	DATE	REMARKS
B	RPM	8-18	AS NOTED
A	RPM	6-9	AS NOTED
Caldwell Tanks, Inc.			
Louisville, KY.			
Fayetteville, North Carolina			
BY:	RPM	TITLE:	ROOF ASSEMBLY
DATE:	2-23-93	DRAWING NO:	E-3510 23

AS BUILT DRAWING

- NOTES:
1. ALUMINUM ROLLING DOOR SHALL CONFORM TO THE PROJECT SPECIFICATIONS. (A)
DOOR SHALL BE BOLTED TO REINFORCING FRAME. A NEOPRENE GASKET SHALL BE PROVIDED AT STEEL AND ALUMINUM INTERFACE.
 2. SEE DWG. #02 FOR FIELD ORIENTATION.
 3. SEE DWG. #25 FOR FIELD PIECE DETAILS.
 4. DOOR SHALL BE PAINTED SAME AS EXTERIOR FINISH. (C)

SUB ASS'Y. NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	PC. WT	TOT. WT
24-DA-01		1	OVERHEAD BEAM			2866
	24-05-01	2	WIDE FLANGE I BEAM (PER ASSY)	W24"-104# X 10'-11 1/2' LG.	1140	
	24-10-07	8	GUSSET (PER ASSY)	6' X 1/2" PL. X 1'-10 1/4" LG.	19	
	24-10-06	4	GUSSET (PER ASSY)	12' X 1/2" PL. X 1'-10 1/4" LG.	38	
	24-40-01	2	FACE PLATE (PER ASSY)	6' X 3/8" BAR X 1'-10 1/4" LG.	15	
	24-10-01	2	END PLATE (PER ASSY)	25 1/2' X 3/4" PL. X 1'-11 1/4" LG.	126	
24-DA-02		2	SIDE POST ASSEMBLY			2218
	24-05-02	2	STRUCTURAL TUBE (PER ASSY)	12' X 12' SQ. X 1/2" WL. X 14'-0" LG.	1065	
	24-10-02	1	TOP PLATE (PER ASSY)	5 3/8' X 3/4" PL. X 23 3/4" LG.	28	
	24-10-03	1	FILL PLATE (PER ASSY)	11 11/16' X 3/4" PL. X 24" LG.	60	
ITEMS LISTED BELOW SHIP LOOSE						
	24-90-01	1	10'W X 12'H ROLLING DOOR (COMP)	SEE NOTE*		
	24-10-05	2	COVER PLATE	24' X 1/4" X 14'-0" LG.	290	

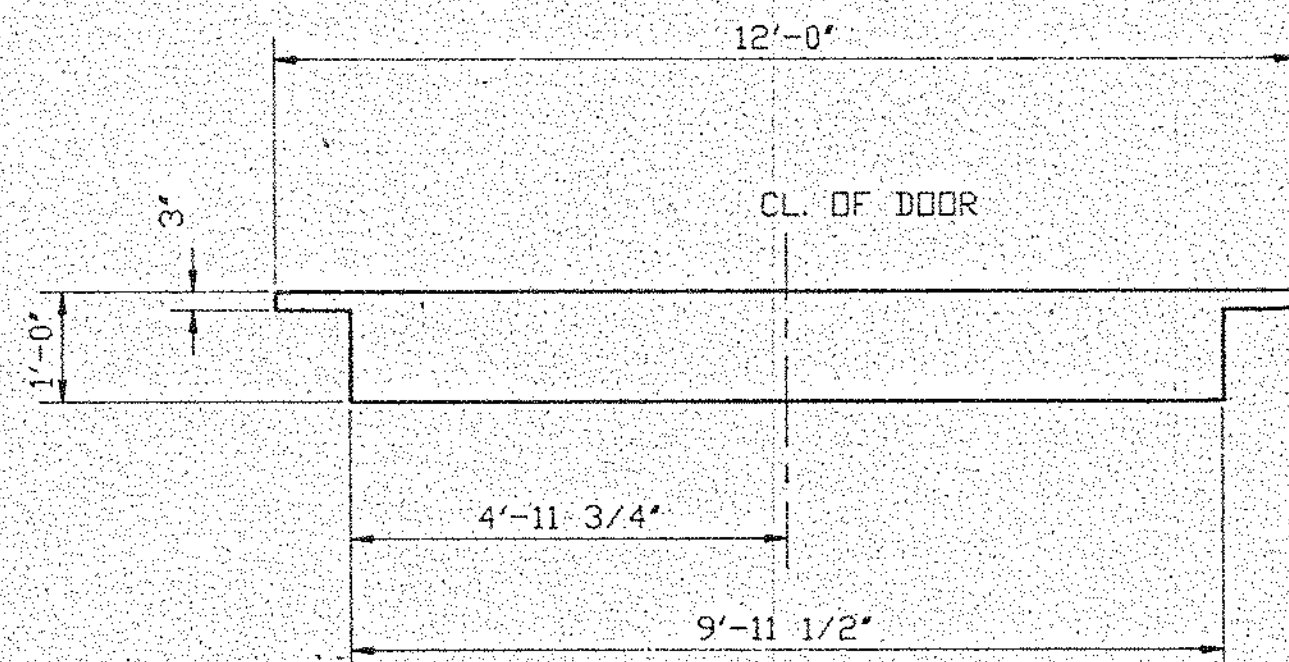
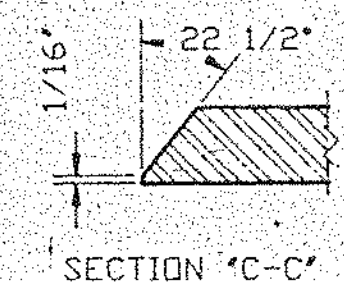
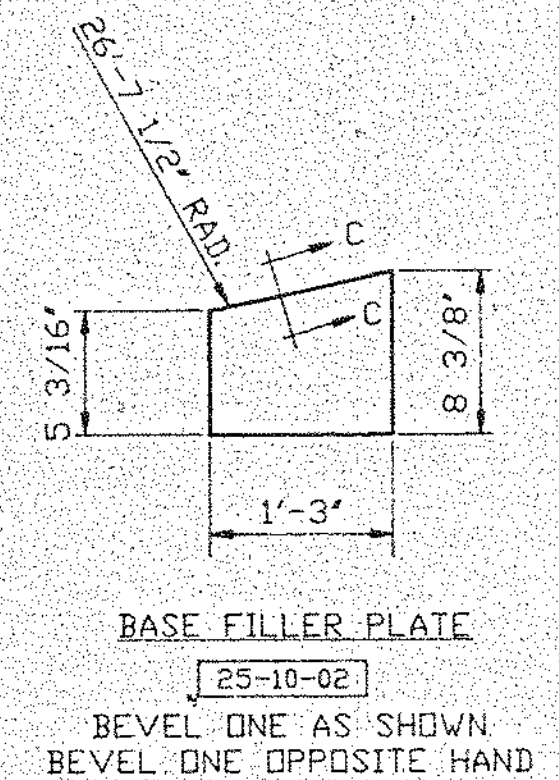
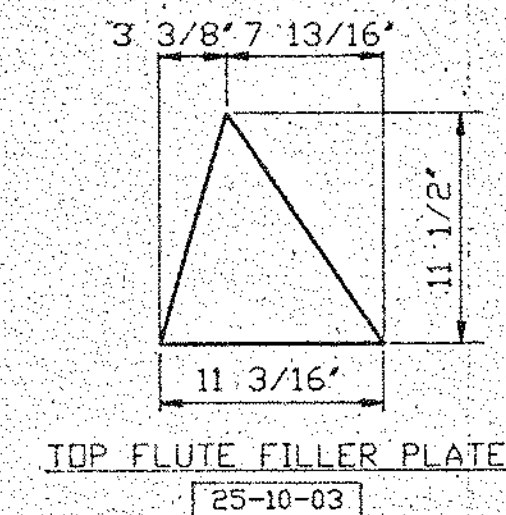
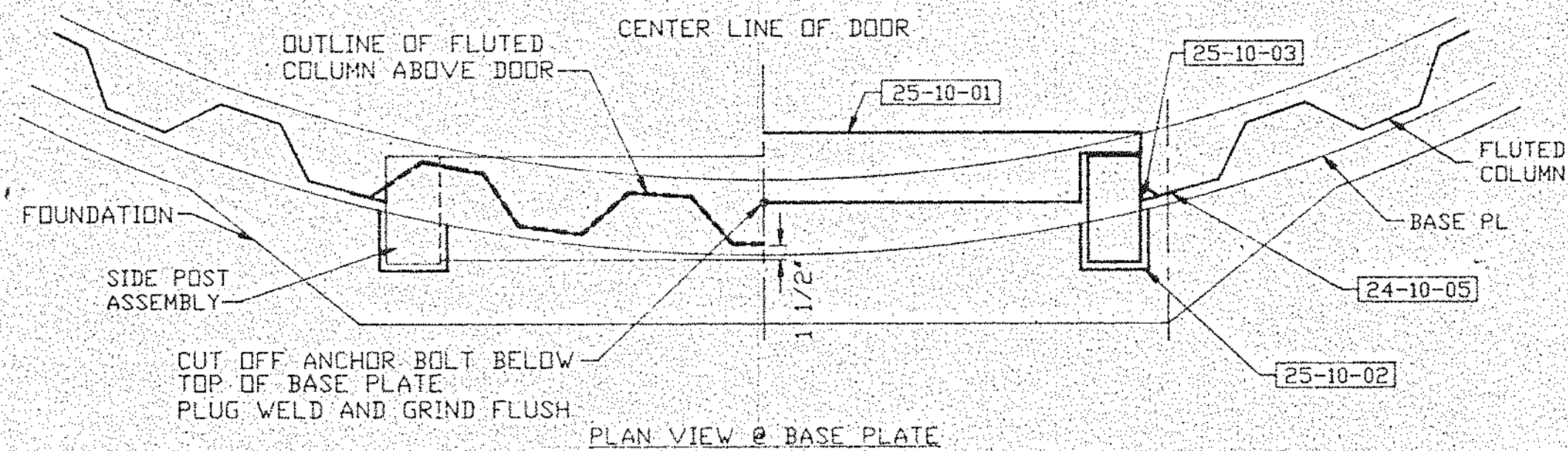


D-13500-024-B			
C	RPM	B-5	AS NOTED.
B	RPM	6-9	AS NOTED.
A	RPM	5-24	AS NOTED. <i>VER</i>
REV.	BY	DATE	REMARKS
CALDWELL TANKS, INC.			
LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	<i>VER</i>	TITLE: ROLLING DOOR FRAMING
DATE:	2-10-93		DRAWING NO. E-3510

Caldwell Tanks, Inc. certifies that it has reviewed, checked and approved this drawing and it is in compliance with the requirements of the contract documents.
Date: _____ By: _____

AS BUILT DRAWING

SUB ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	PC WT	TOT WT
ALL ITEMS SHIP LOOSE						
	25-10-01	1	INSIDE BASE FILLER PLATE	12" X 1/4" X 12'-0" LG.	125	
	25-10-02	2	BASE FILLER PLATE	1 1/2" PL. (MISC. DROP)	120	240
	25-10-03	2	TOP FILLER PLATE	1/4" PL. (MISC. DROP)	6	12



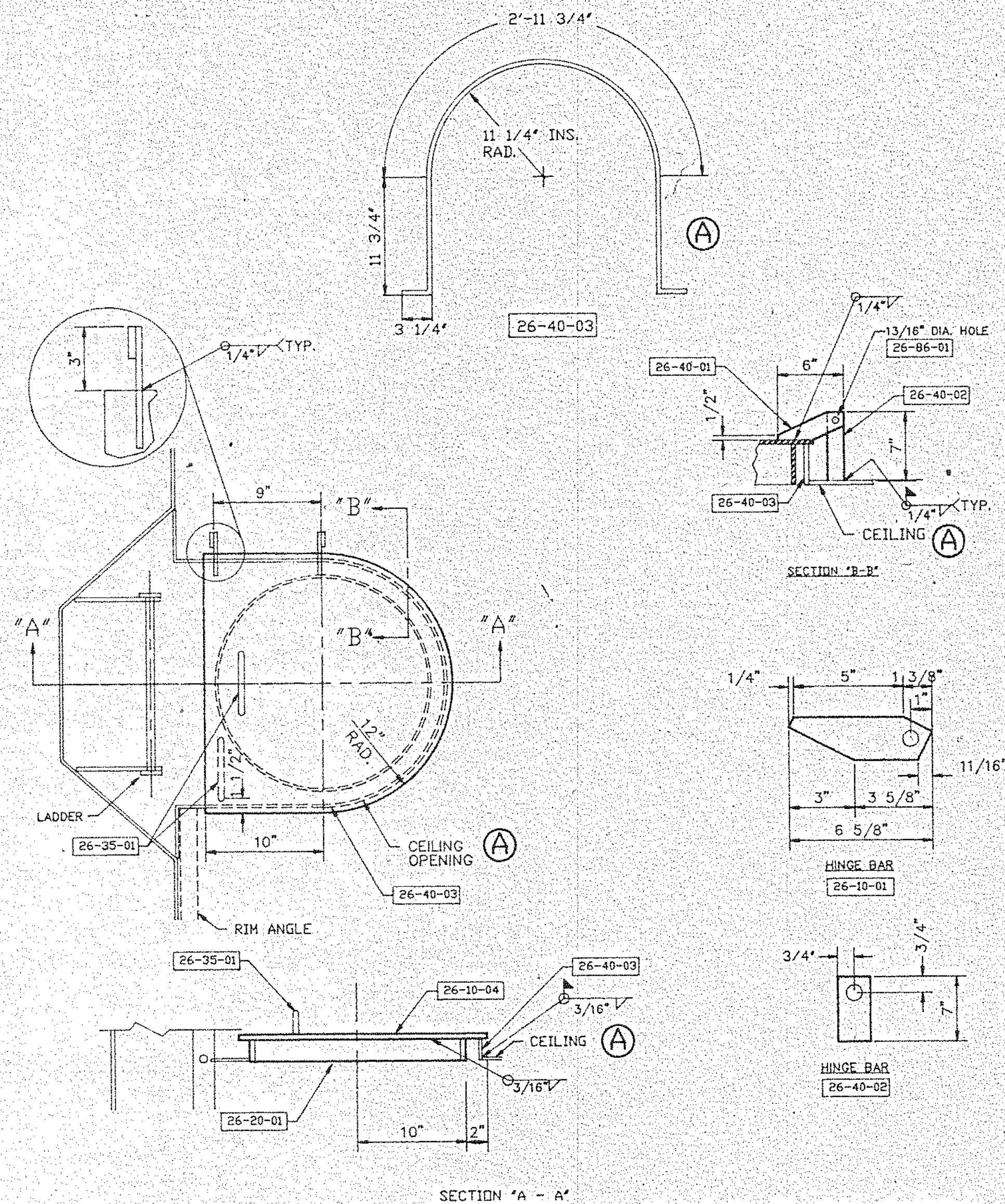
WORK THIS DRAWING
W/DWG. #24

D-13500-025-A

REV.	BY	DATE	REMARKS
CALDWELL TANKS, INC. LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY: RPM	DATE: 2-11-93	TITLE: ROLLING DOOR FRAMING	DRAWING NO: E-3510
			25

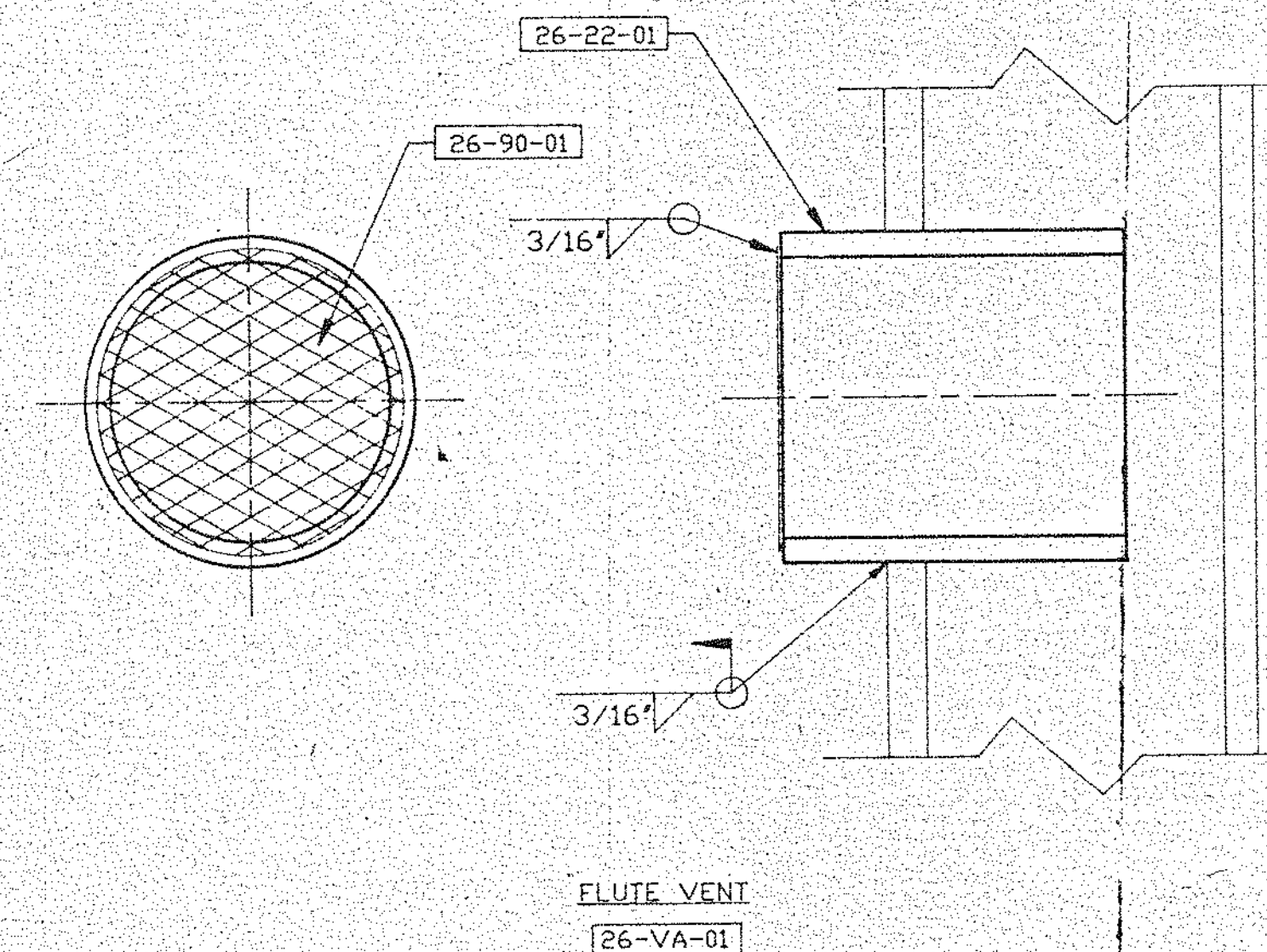
AS BUILT DRAWING

SUB ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	WEIGHT
26-MH-01		1	CONDENSATE CEILING HATCH (A)		40
	26-20-01	1	MANHOLE NECK	20" O.D. X 1/4" MIN. X 2" LG.	
	26-10-01	2	HINGE BAR W/HOLE	2" X 1/4" PL. W/ 13/16" DIA. HOLE	
	26-40-02	2	HINGE BAR W/HOLE	1 1/2" BAR X 1/4" W/ 13/16" DIA. HOLE	
	26-10-04	1	MANHOLE COVER	3/16" PLATE	
	26-35-01	2	HANDLE	STD. 3/4" DIA. BAR X 6" LG.	
	26-86-01	2	M. BOLTS (ZINC PLATED)	3/4" DIA. x 1 1/2" LG. W/WASHER	
ITEMS LISTED BELOW ARE SHIPPED SEPARATELY					
	26-40-03	1	OPENING NECK	4" x 1/4" x 5'-4 1/2" LG.	



SEE DWG. #02 FOR LADDER ORIENTATION

SUB ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	WEIGHT
26-VA-01		8	FLUTE VENT ASSEMBLY		40
	26-22-01	1	VENT BODY	10' EX. STRG. PIPE X 8' LG.	
	26-90-01	1	FLATTENED-EXPANDED METAL	1/2"-#16 GA X 9 3/4' DIA.	



- NOTES:
1. FIELD INSTALL @ ORIENTATIONS INDICATED ON DWG. 02
 2. INSTALL BOTTOM VENTS @ 2'-6" ABOVE GIRDER LEVEL 2. (A)
 3. INSTALL TOP VENTS @ 5'-6" ABOVE GIRDER LEVEL 5.

D-13500-026-A

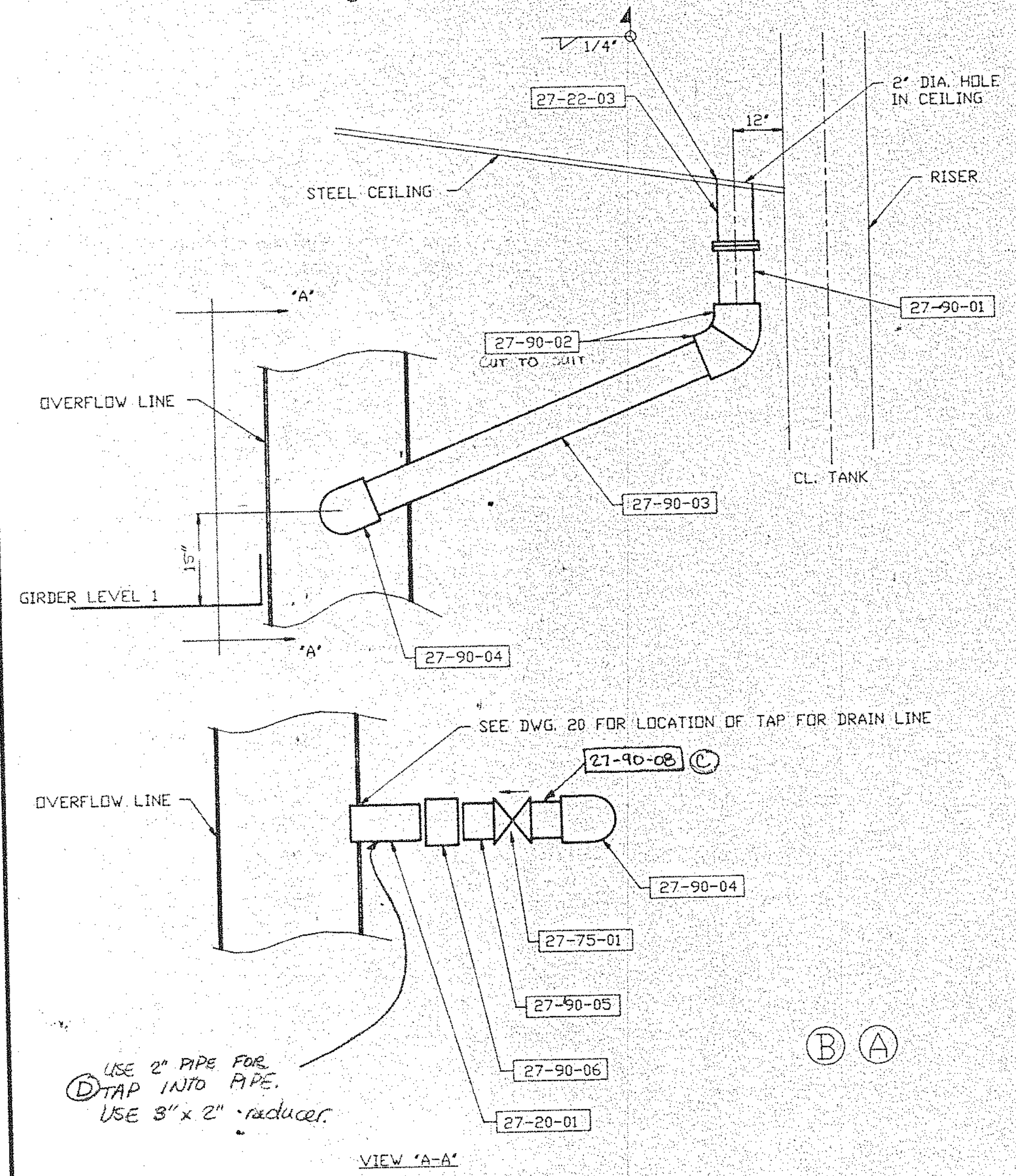
REV.	BY	DATE	REMARKS
A	RPM	5-24	AS NOTED. <i>SL</i>
CALDWELL TANKS, INC.			
LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	TITLE:	GIRDER HATCH & FLUTE VENTS
DATE:	2-17-93	DRAWING NO:	E-3510

26

Caldwell Tanks hereby certifies that it has reviewed, checked, and approved this drawing, and that it is in accordance with the requirements of the contract.

AS BUILT DRAWING

BILL OF MATERIAL					PC. WT.
SUB-ASSY NO	PART NO	QTY	DESCRIPTION	MAT'L REQ'D.	
B 27-CD-01		1	CEILING DRAIN ASSY.		
	27-90-01	1	PVC PIPE (P.E. x F.E.)	3" DIA. x 6' LG.	
	27-90-02	2	45° PVC BEND	FDR 3" DIA. PVC	
	27-90-04	1	90° PVC BEND	FDR 3" DIA. PVC	
	27-90-03	1	PVC PIPE (P.E. x P.E.)	3" DIA. x 25'-0" LG.	
	27-90-05	1	STEEL CLOSE NIPPLE	FDR 3" DIA. PIPE	
	27-90-06	1	STEEL PIPE UNION	FDR 3" DIA. PIPE	
	27-75-01	1	THREADED CHECK VALVE	FDR 3" DIA. PIPE	
	27-20-01	1	STEEL PIPE (THD. x THD.)	3" DIA. x 12" LG.	
	27-90-07	2	PVC PIPE UNION (EXTRA)	FDR 3" DIA. PVC	
	27-90-09	1	GLUE FOR PVC PIPE	(1) CAN	
	27-90-10	1	CLEANER FOR PVC PIPE	(1) CAN	
	27-22-03	1	STEEL PIPE (P.E. x F.E.)	3" DIA. x 6' LG.	
	C 27-90-08	1	PVC PIPE (THD. x P.E.)	3" DIA. x 16" LG.	



BILL OF MATERIAL					PC. WT.
SUB-ASSY NO	PART NO	QTY	DESCRIPTION	MAT'L REQ'D.	
27-NP-01		1	NAMEPL. ASSY.	(SHIP W/ 18-DA-01)	
	27-90-02	1	NAMEPLATE	CAST ALUMINUM	
	27-30-01	2	MOUNTING ANGLE	1" x 1" x 1/8" ANGLE	
	27-86-01	4	DRIVE SCREW	#8 x 5/8"	

CALDWELL TANKS INC.

LOUISVILLE, KENTUCKY

◇

DATE: 1993

CAPACITY 1,000,000 GALS.

BOTTOM HEIGHT 112 FT.

OVERFLOW HEIGHT 142 FT.

NO. E-3510

0 IN.

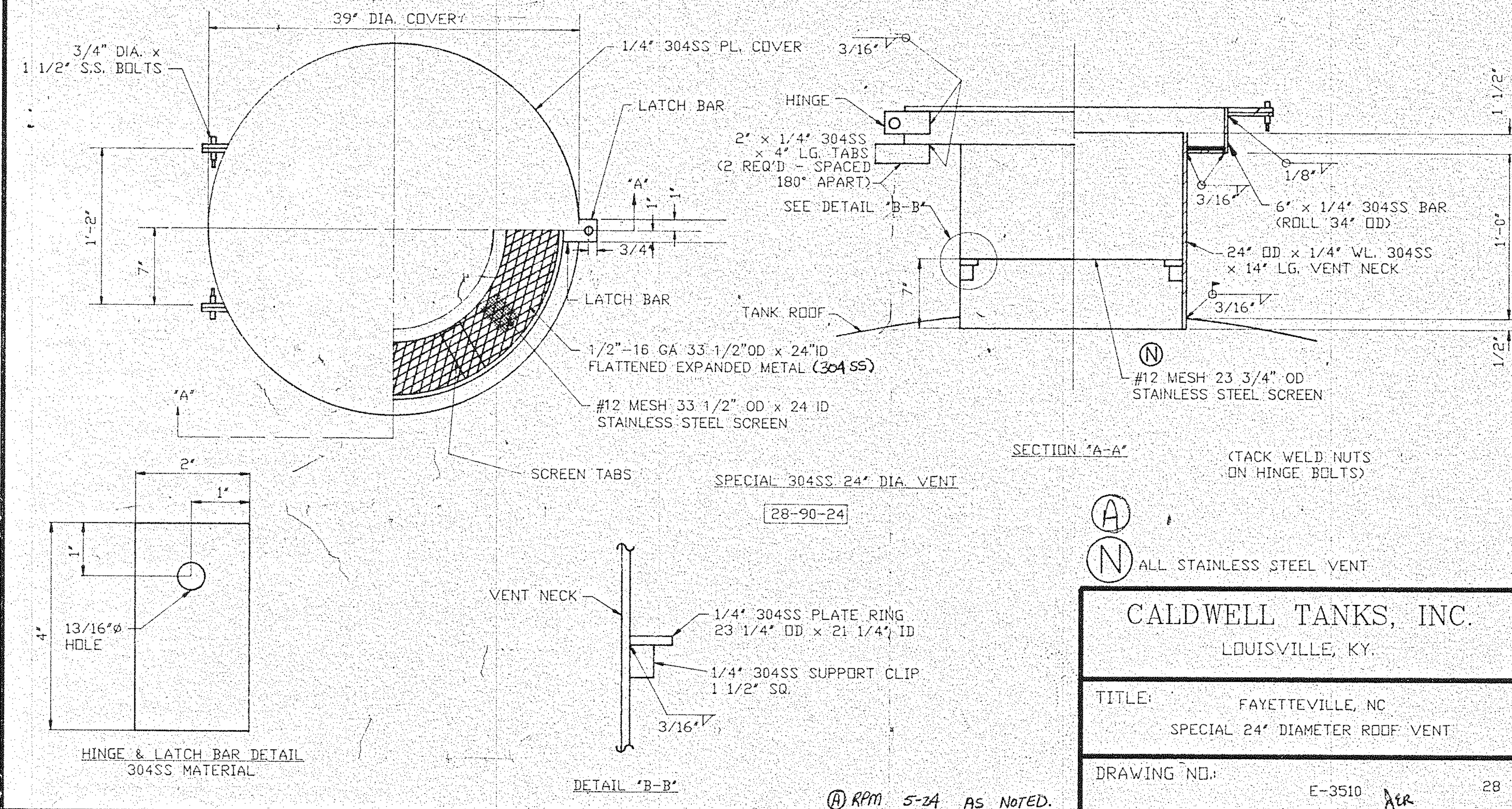
0 IN.

NAMEPLATE ASSEMBLY
27-NP-01

D-13500-027-A			
D RPM 12-3 AS BUILT			
C	RPM	6-24	AS NOTED.
B	RPM	6-23	AS NOTED.
A	RPM	5-24	AS NOTED.
REV.	BY:	DATE	REMARKS
CALDWELL TANKS, INC.			
LOUISVILLE, KY.			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	TITLE	NAMEPLATE & COND. CLG. DRAIN
DATE:	2-17-93	DRAWING NO:	E-3510 27

AS BUILT DRAWING

PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	WEIGHT
28-90-24	1	SPECIAL 24" DIAMETER ROOF VENT	304SS	262#
28-90-01	1	E-309 WELDING ROD		



SECTION "A-A"

(TACK WELD NUTS
ON HINGE BOLTS)

(A)

(N)

ALL STAINLESS STEEL VENT

CALDWELL TANKS, INC.
LOUISVILLE, KY.

TITLE: FAYETTEVILLE, NC
SPECIAL 24" DIAMETER ROOF VENT

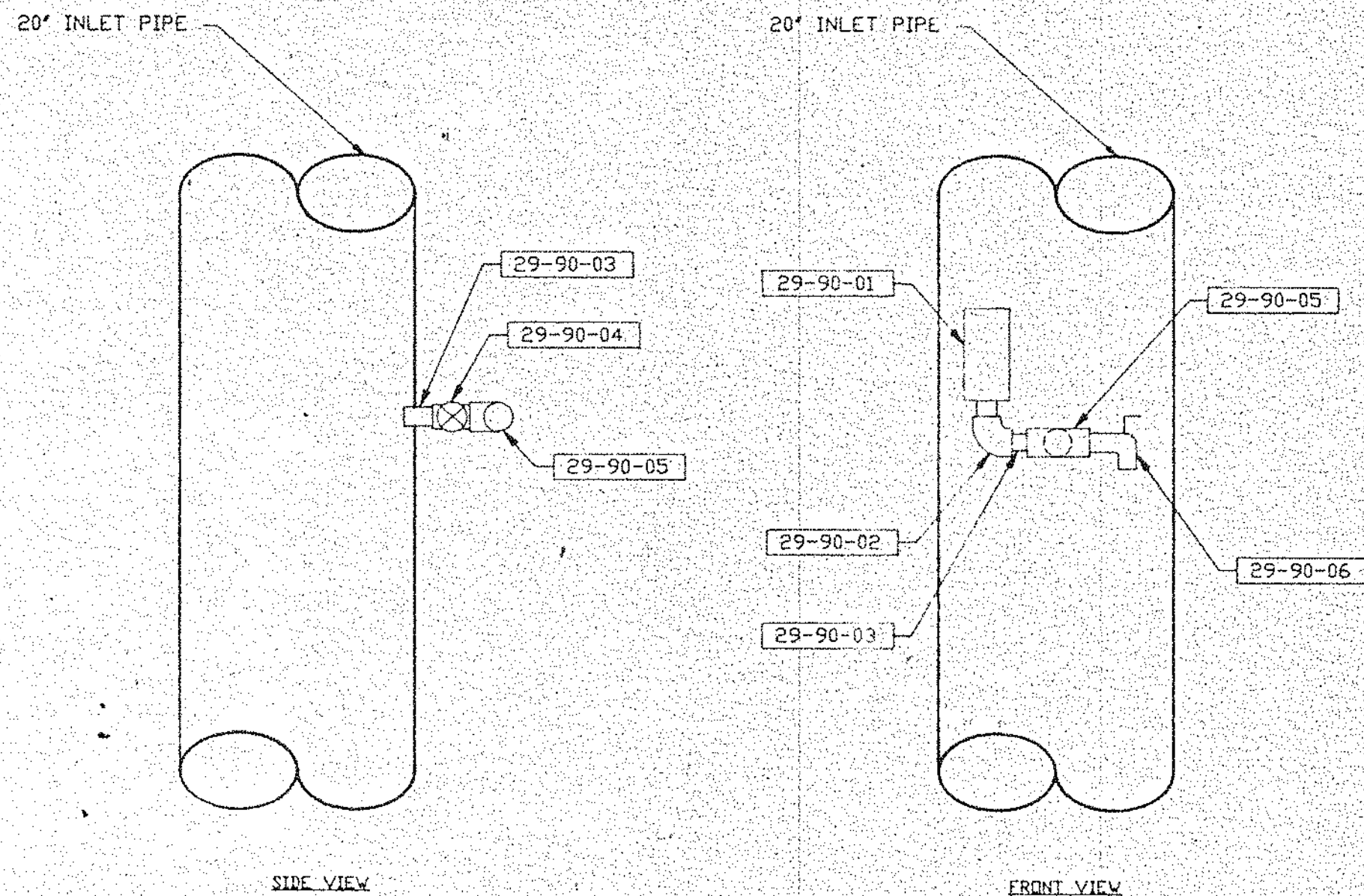
DRAWING NO.: E-3510 28

(A) RPM 5-24 AS NOTED.

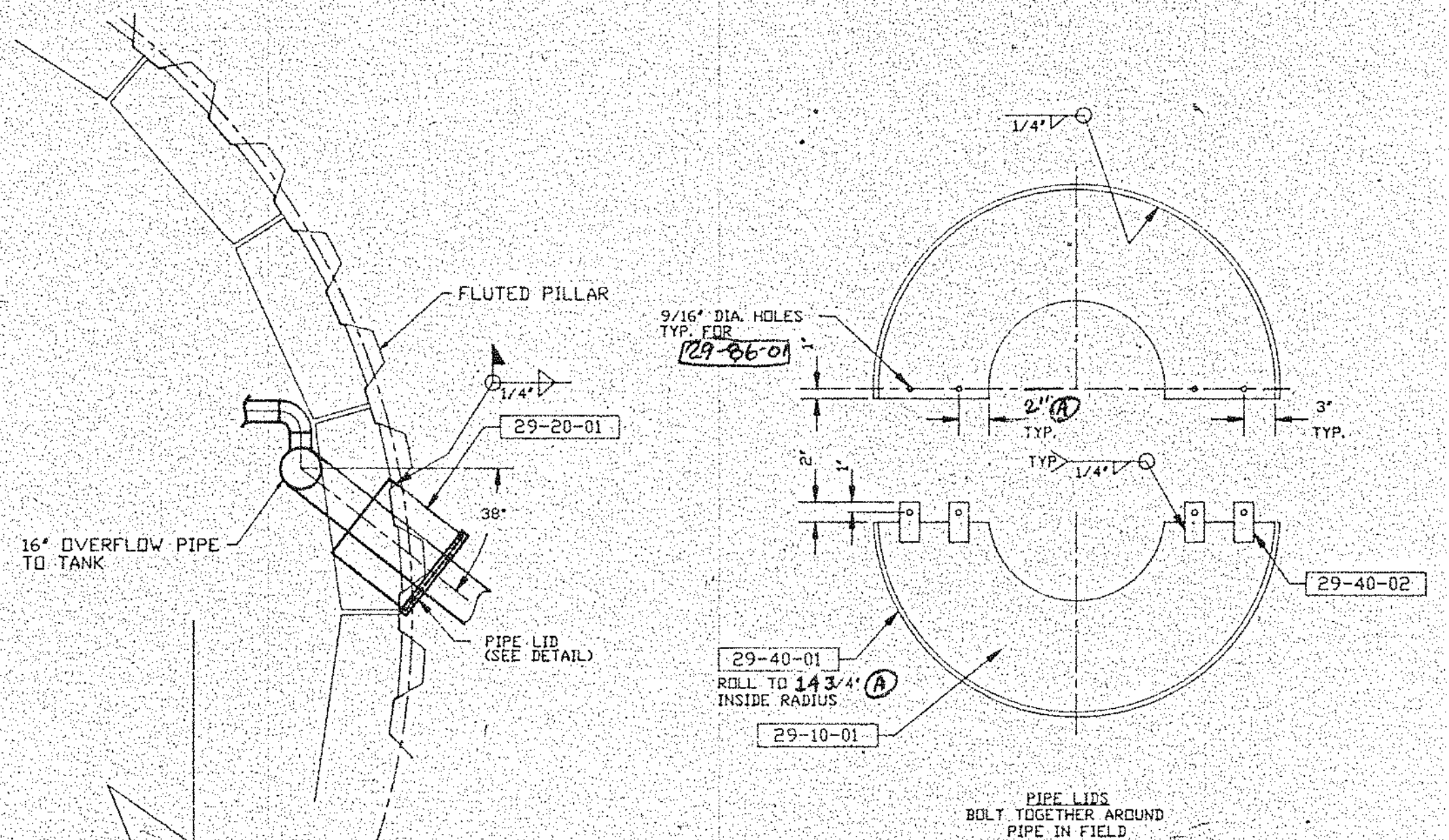
Caldwell Tanks hereby certifies
that it has reviewed, checked
and approved this shop drawing
and it is in conformance with
the requirements of the contract
documents.
Date: _____ By: _____

AS BUILT DRAWING

BILL OF MATERIAL				
SUB-ASSY	PART NO	QTY	DESCRIPTION	MAT'L REQ'D
	29-90-01	1	PRESSURE GAUGE	4 1/2" W/VEGETABLE OIL
	29-90-02	1	90° ELBDW	1/2"
	29-90-03	2	PIPE NIPPLE	1/2" DIA. x 2' LG.
	29-90-04	1	CORPORATION STOP	1/2" MALE x FEMALE THRD. ENDS
	29-90-05	1	TEE	1/2"
	29-90-06	1	SAMPLE COCK	1/2"



BILL OF MATERIAL				
SUB-ASSY NO	PART NO	QTY	DESCRIPTION	MAT'L REQ'D
29-PL-01	29-40-01	1	PIPE LID ASSY.	3' x 1 1/4" BAR x 3'-10 3/4" LG.
	29-10-01	1	FLAT BAR	1/2" 30' OD x 17 3/4" ID x 1/4" PLATE
29-PL-02	29-40-01	1	PIPE LID ASSY.	3' x 1 1/4" BAR x 3'-10 3/4" LG.
	29-10-01	1	FLAT BAR	1/2" 30' OD x 17 3/4" ID x 1/4" PLATE
	29-40-02	4	BOLT LUGS	1/2" x 1/4" BAR x 4" LG. w/9/16" HOLE
ITEMS LISTED BELOW ARE SHIPPED LOOSE				
	29-86-01	4	BOLTS	1/2" DIA. x 1 1/2" LG. M. BOLTS
	29-20-01	1	PIPE SLEEVE	1/4" DIA. EXTRA HEAVY PIPE x 3'-0" LG.

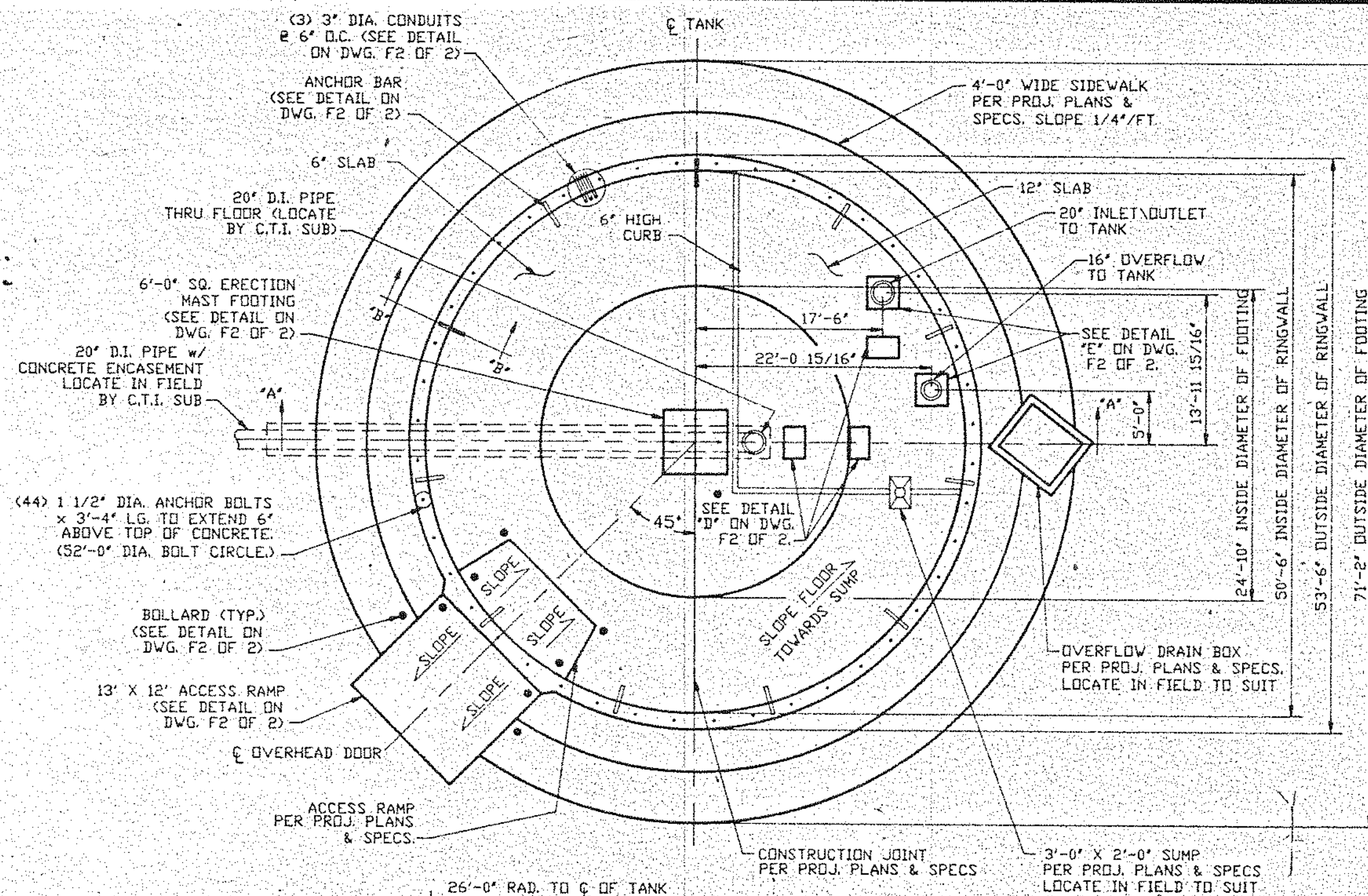


REV.	BY:	CK:	DATE	REMARKS
	A. RPM		9-8	AS NOTED.
CALDWELL TANKS, INC.				
LOUISVILLE, KY.				
FAYETTEVILLE, NORTH CAROLINA				
BY:	RPM	TITLE:	PRESSURE GAUGE & PIPE SLEEVE	
DATE:	5-26-93	DRAWING NO:	E-3510	29

Caldwell Tanks, Inc. has reviewed and approved this shop drawing and it is in accordance with the requirements of the contract documents.

Date: _____ By: _____

AS BUILT DRAWING



NOTES:

FOUNDATION CONSTRUCTION SHALL COMPLY WITH A.C.I. 318-89, A.W.W.A D100-84 AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS. WIND LOAD PER A.W.W.A + 50% INCREASE. SNOW LOAD = 25 PSF, ZONE 1 (2.5%). CONCRETE SHALL BE 4,000 PSI @ 28 DAYS.

REINFORCEMENT SHALL CONFORM TO A.S.T.M. A-615 GR. 60. HORIZONTAL HOOP AND VERTICAL RINGWALL BARS SHALL BE LAP SPICED 30' MINIMUM. SPICES NEED NOT BE STAGGERED.

CONSTRUCTION JOINTS SHALL BE ROUGHENED ACROSS ENTIRE FACE WITH 1/4' MINIMUM DEPTH INDENTATIONS.

ANCHOR BOLTS, ANCHOR BARS AND BOLLARD PIPE TO BE FURNISHED BY CALDWELL TANKS, INC. AND INSTALLED BY THE FOUNDATION SUBCONTRACTOR. ALL OTHER FOUNDATION MATERIAL INCLUDING PIPING AND PIPE SUPPORTS IN BASE OF TANK TO BE FURNISHED AND INSTALLED BY THE FOUNDATION SUBCONTRACTOR.

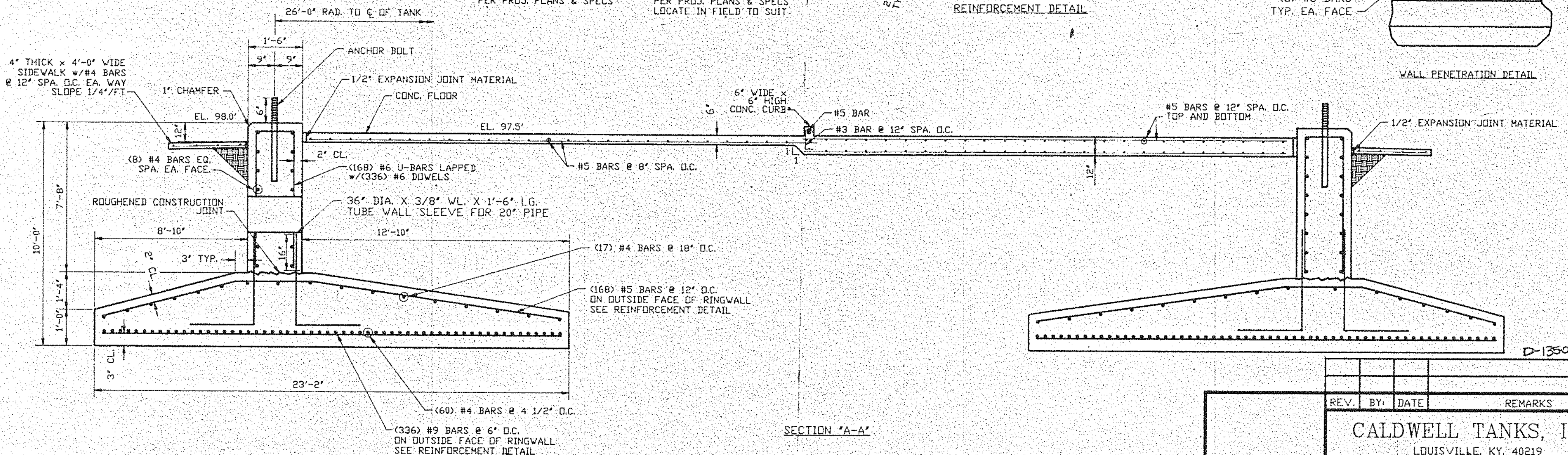
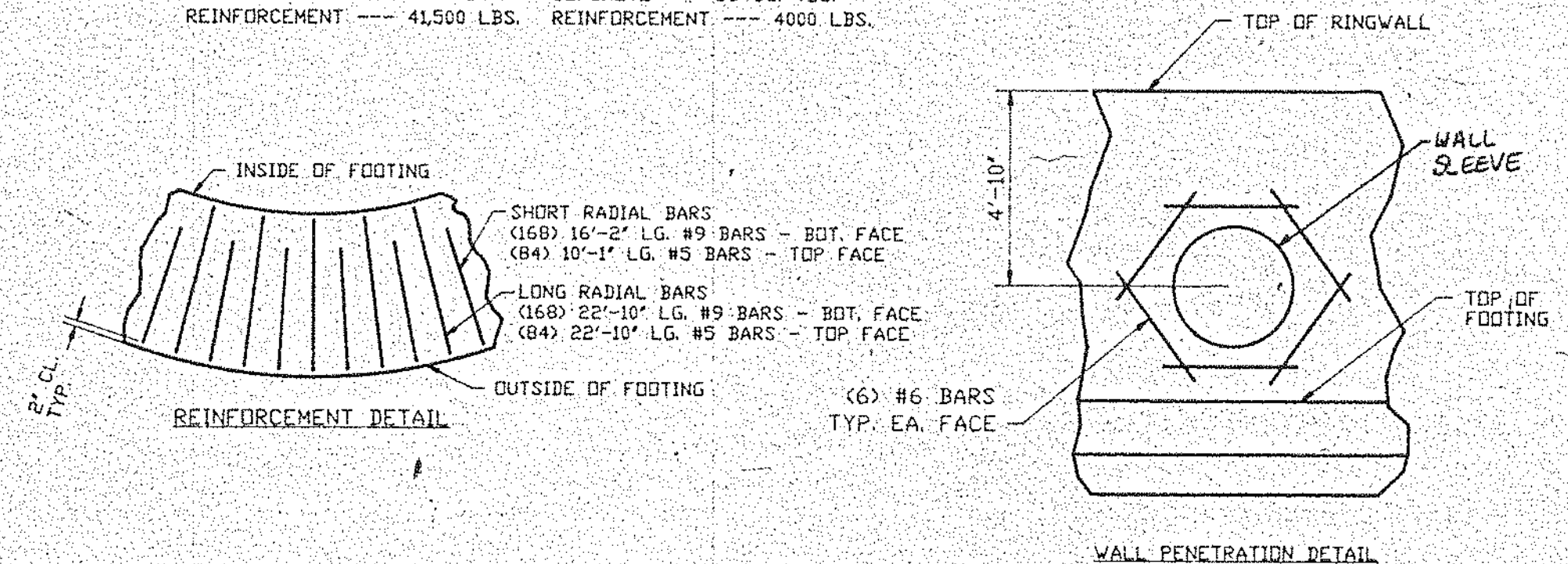
THE TOP OF RINGWALL SHALL BE LEVEL WITHIN (+) 1/8' IN 30 FEET WITH A MAXIMUM DIFFERENTIAL OF (+) 1/4' BETWEEN ANY TWO POINTS ON THE CIRCUMFERENCE.

ANCHOR BOLTS SHALL BE PLACED WITHIN 1/16' OF THE PLAN DIMENSIONS, BE PLUMB WITHIN 1/8' IN 12' AND EXTEND ABOVE THE TOP OF FOUNDATION TO WITHIN 1/2' (+) OF THE SPECIFIED PROJECTION.

THE FOUNDATION WAS DESIGNED PER THE SOIL REPORT PREPARED BY GEOTECHNOLOGIES, INC. THE NET ALLOWABLE SOIL BEARING = 3,500 PSF (DL+WL+SL+WINDL) = 4,667 PSF (DL+WL+EQL).

FOUNDATION QUANTITIES:

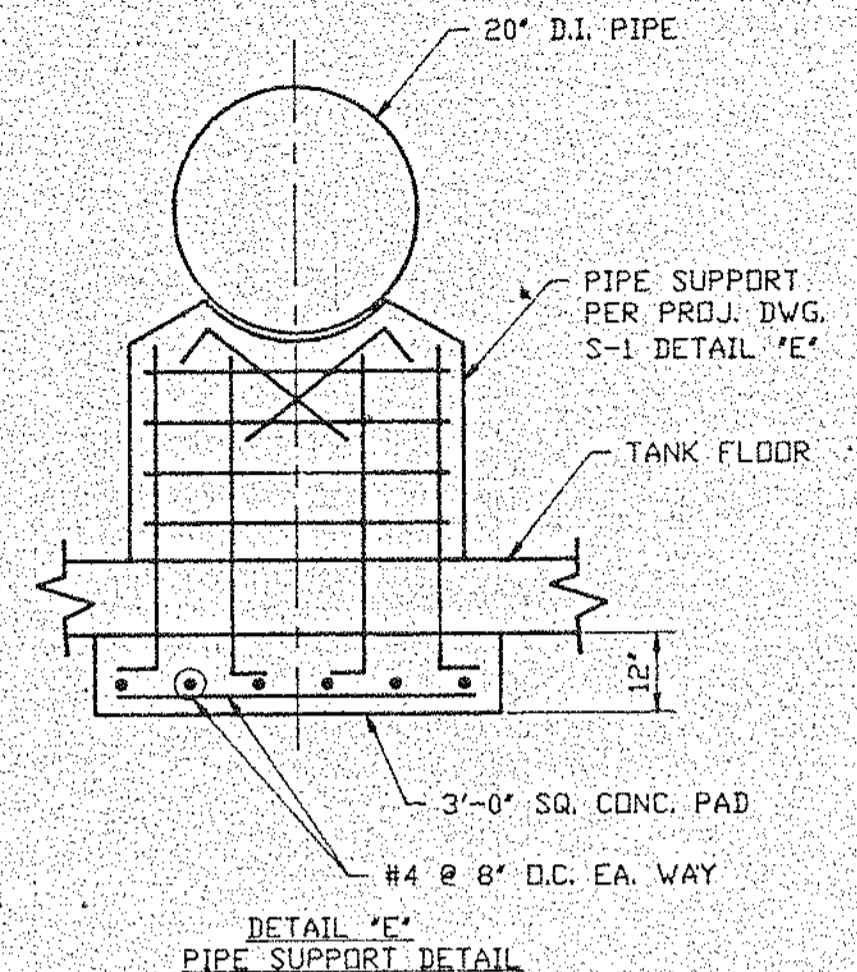
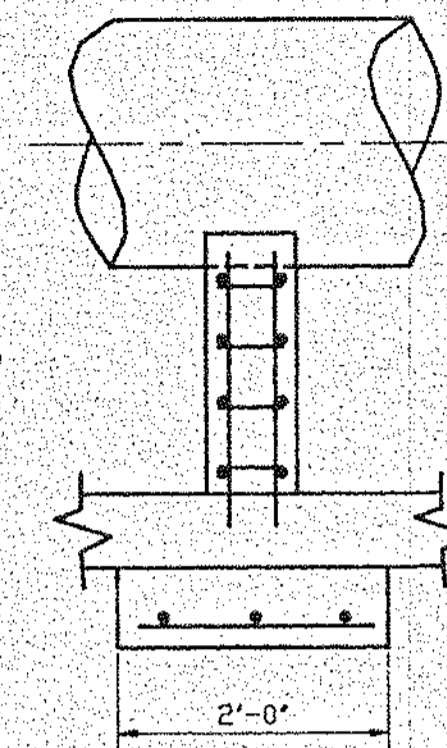
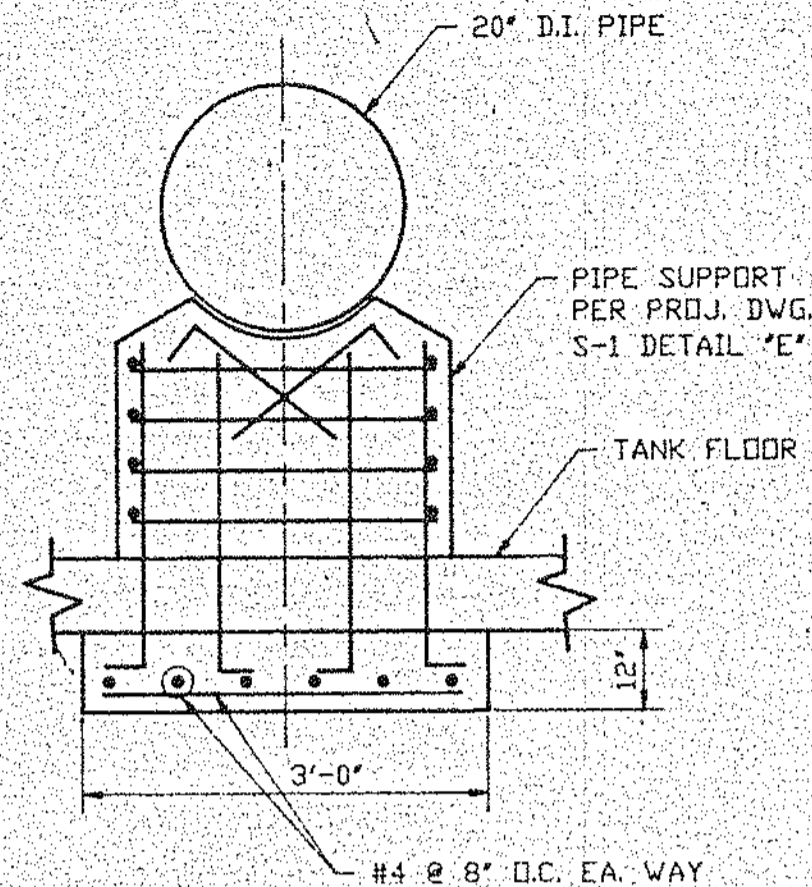
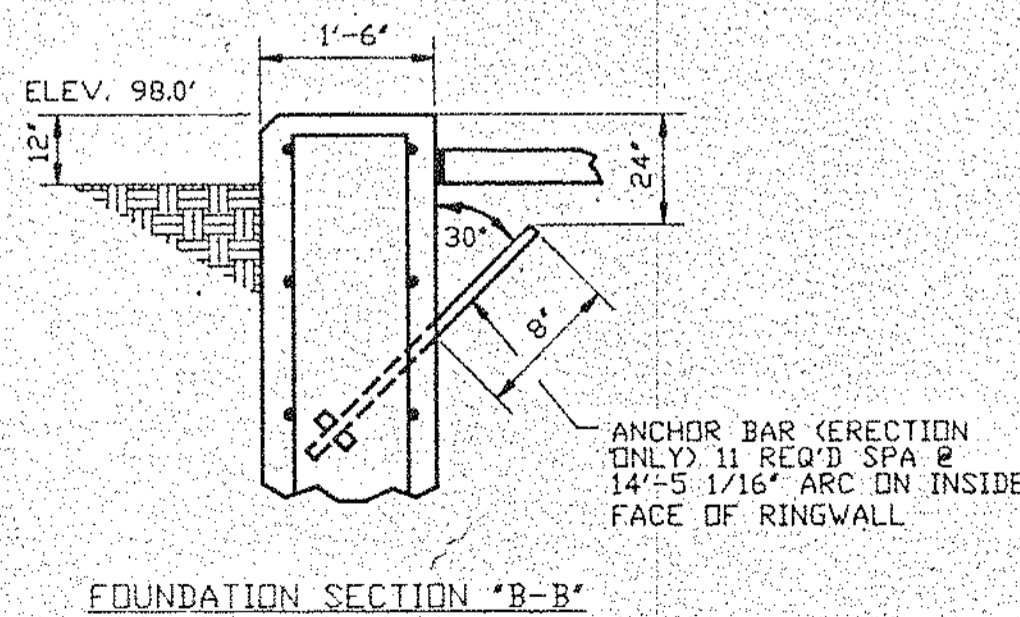
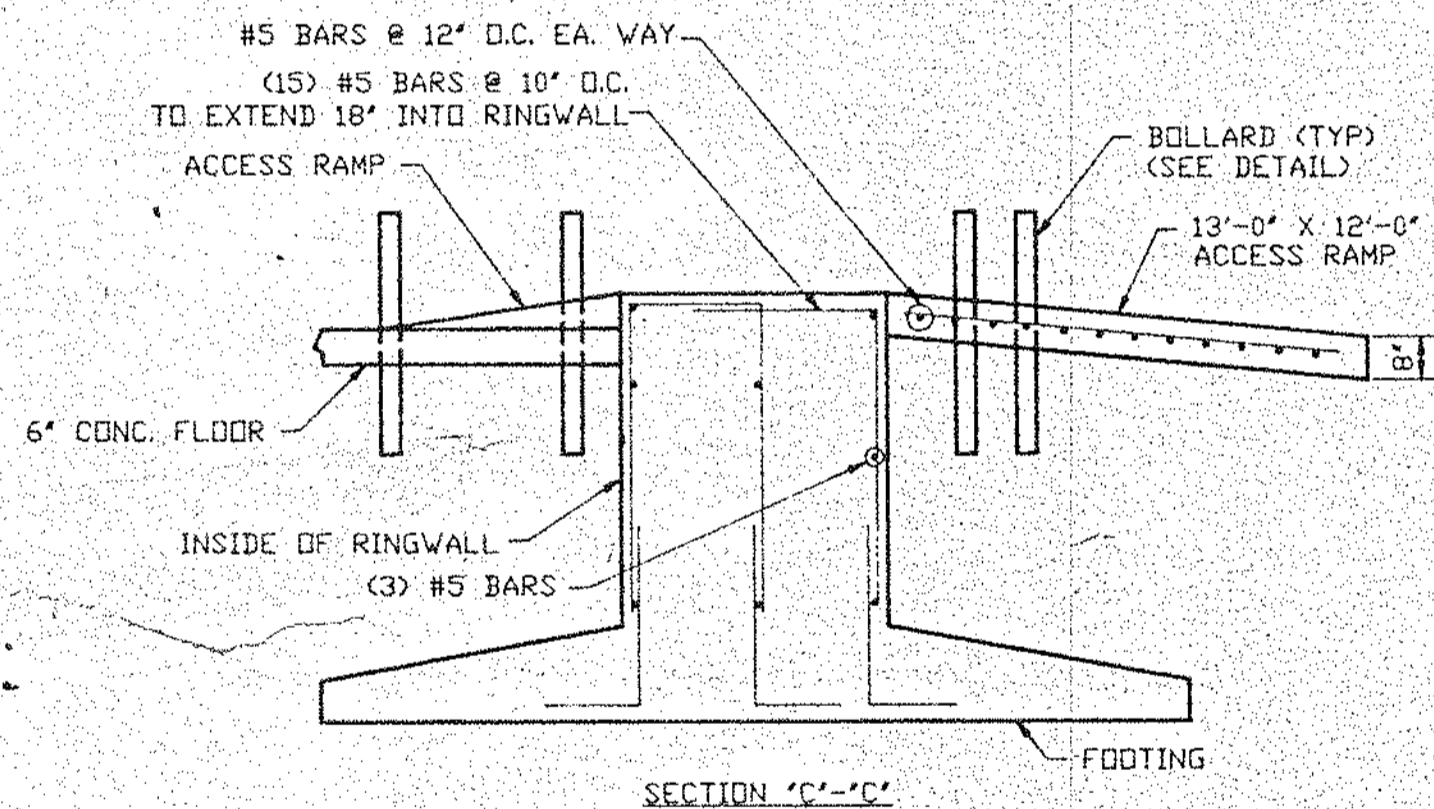
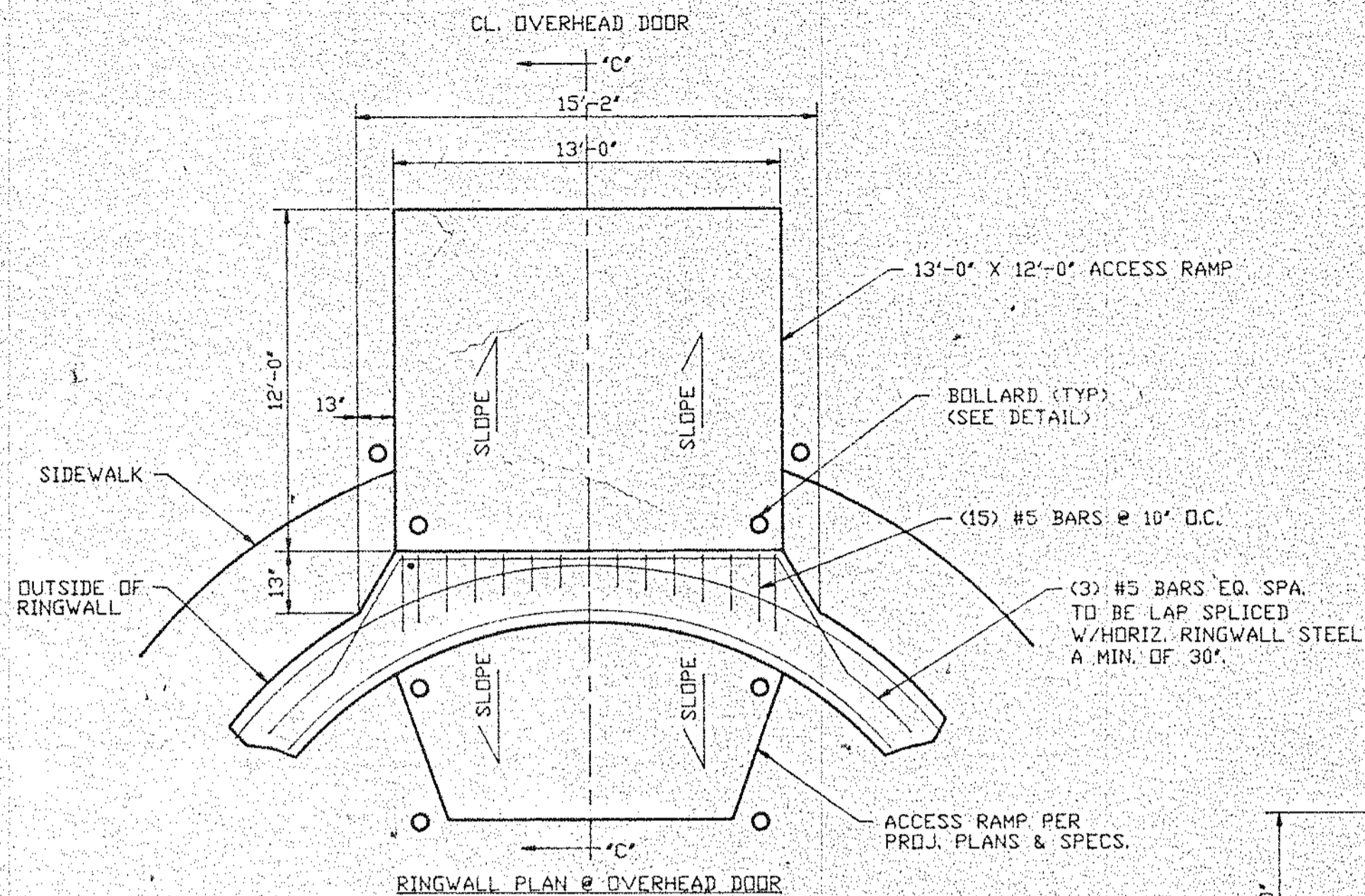
RING FOUNDATION	SLAB FOUNDATION
CONCRETE ---- 292 CU. YDS.	CONCRETE ---- 56 CU. YDS.
REINFORCEMENT ---- 41,500 LBS.	REINFORCEMENT ---- 4000 LBS.



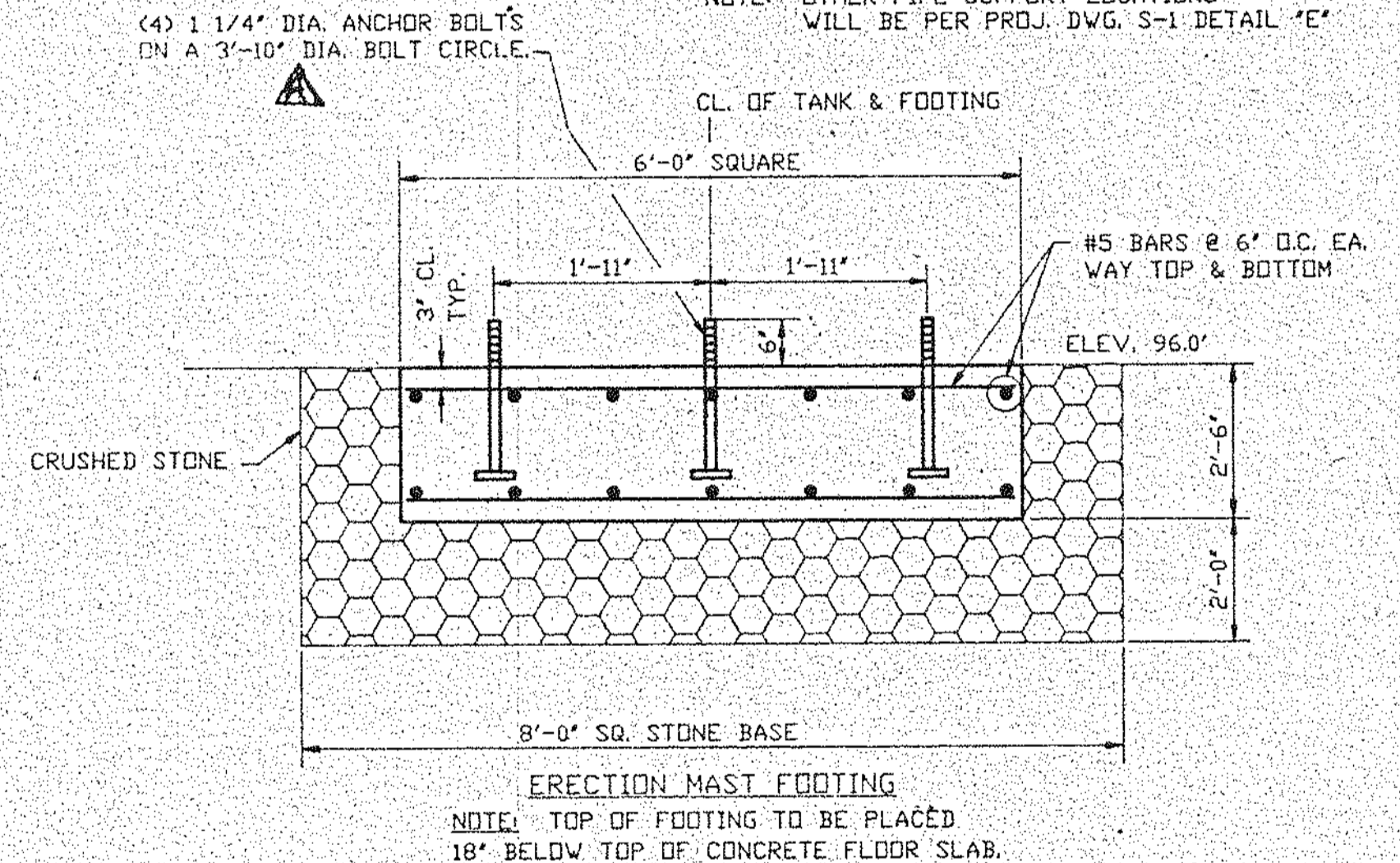
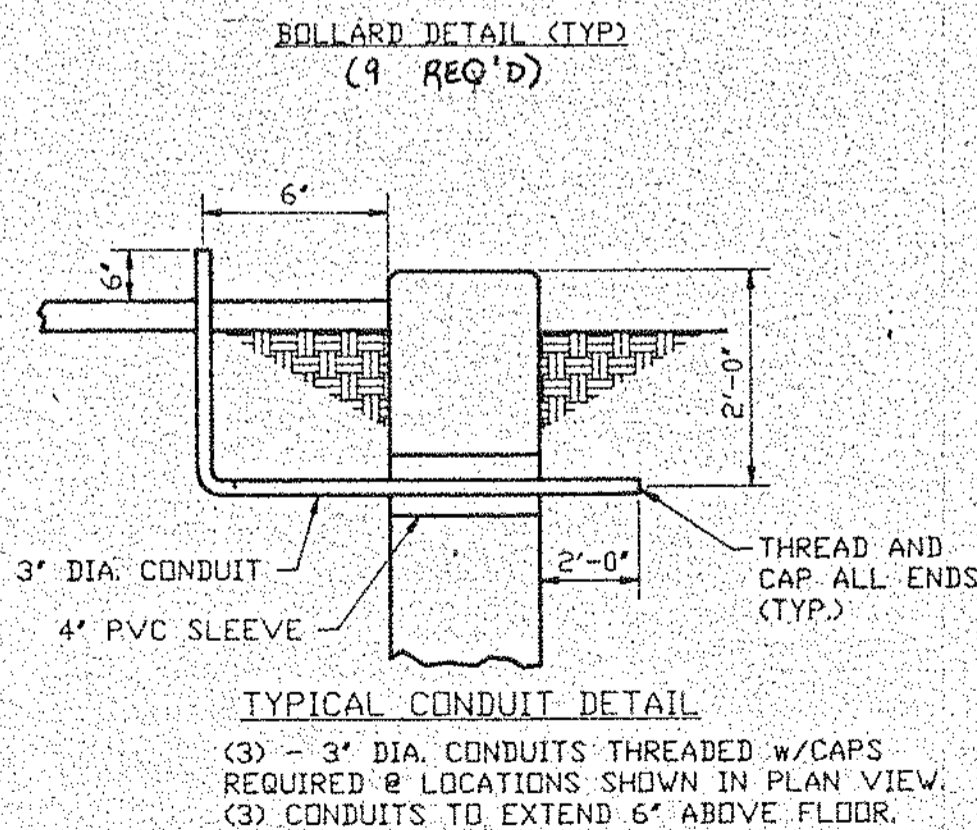
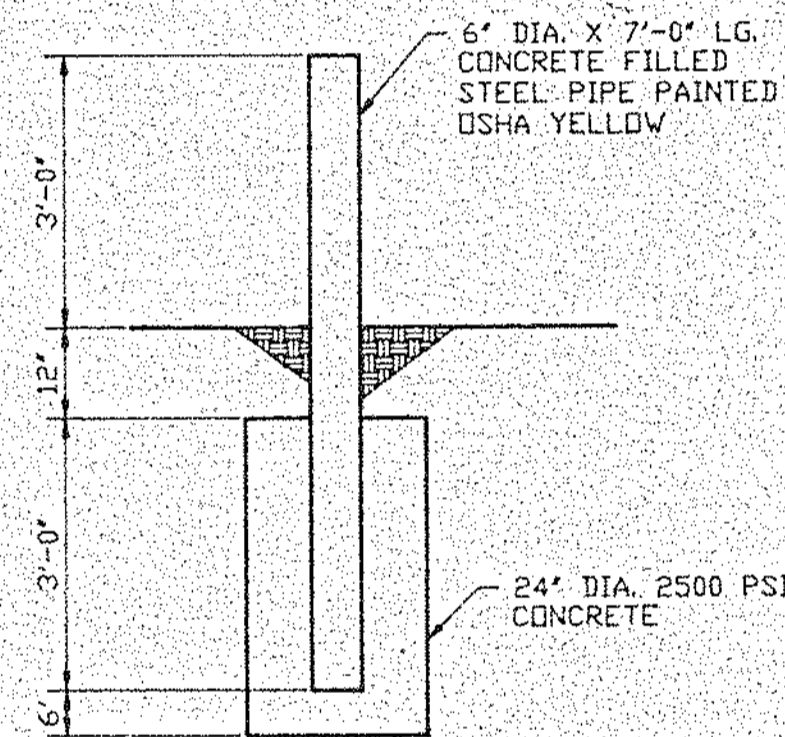
SECTION 'A-A'

REV.	BY	DATE	REMARKS
<div> <div> Caldwell Tanks, Inc. Louisville, KY 40219 </div> <div> 1,000,000 GALLON FLUTED COLUMN FAYETTEVILLE, NORTH CAROLINA </div> </div>			
BY:	RPM	DATE:	TITLE: RING FOUNDATION
DATE:	1-26-93	DRAWING NO:	E-3510 F1

AS BUILT DRAWING



NOTE: OTHER PIPE SUPPORT LOCATIONS WILL BE PER PROJ. DWG. S-1 DETAIL 'E'



NOTE: TOP OF FOOTING TO BE PLACED 18" BELOW TOP OF CONCRETE FLOOR SLAB.

D-13500-029-A

REV.	BY	DATE	REMARKS
A	RPM	8-3	AS NOTED
Caldwell Tanks, Inc.			
LOUISVILLE, KY. 40219			
1,000,000 GALLON FLUTED COLUMN TANK			
FAYETTEVILLE, NORTH CAROLINA			
BY:	RPM	per	TITLE: MISCELLANEOUS DETAILS
DATE:	1-29-93	DRAWING NO:	E-3510 2 OF 2

AS BUILT DRAWING



**PUBLIC WORKS COMMISSION
OF THE
CITY OF FAYETTEVILLE
NORTH CAROLINA**

**CLINTON ROAD
ELEVATED STORAGE TANK**

**RECORD DRAWINGS
JANUARY 1995**

INDEX OF DRAWINGS

CIVIL

C-1 SITE AND YARD PIPING PLAN

STRUCTURAL

S-1 GENERAL NOTES, PLAN, SECTIONS AND DETAILS

MECHANICAL

M-1 ELEVATED STORAGE TANK
ELEVATION PLAN AND SECTIONS

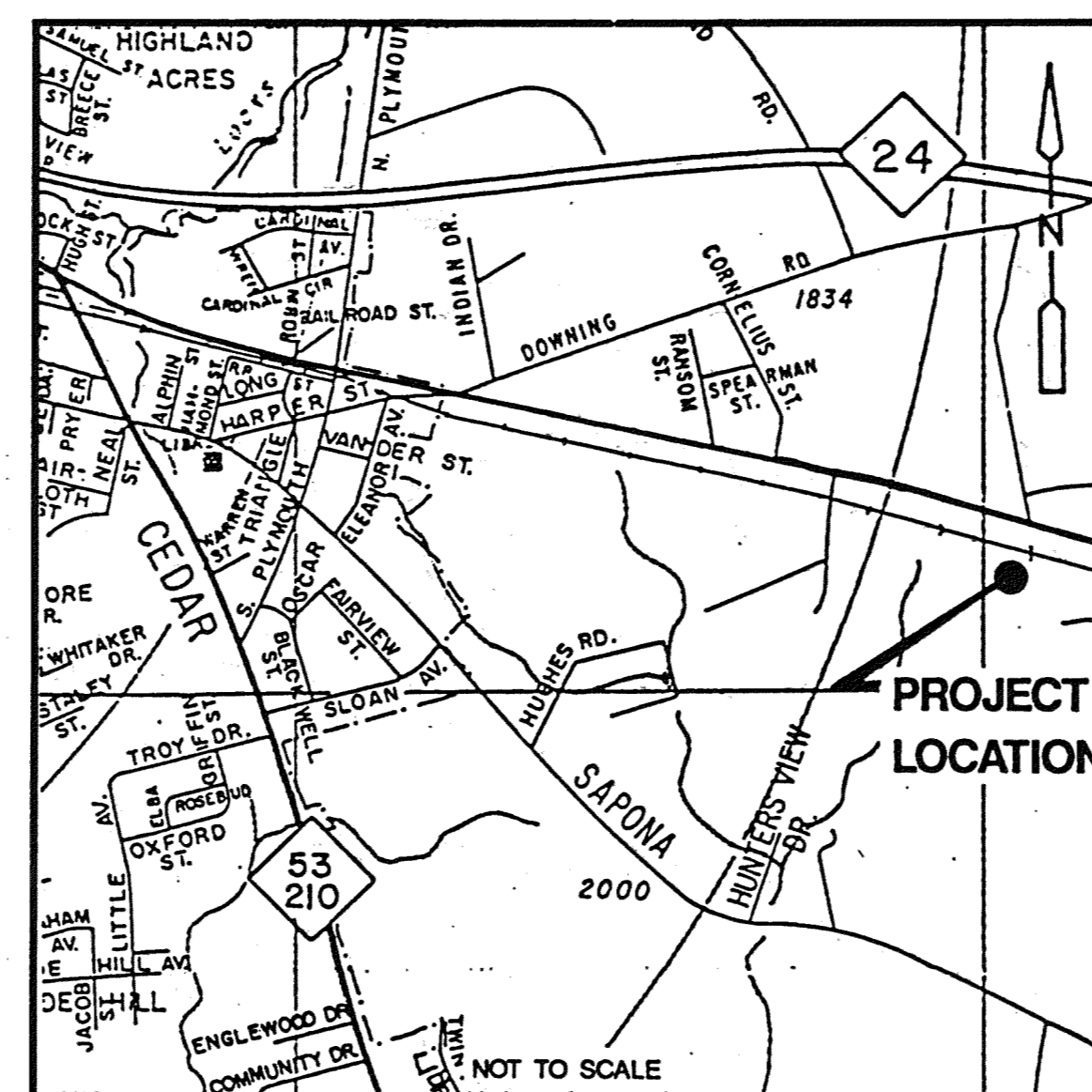
ELECTRICAL

E-1 SITE PLAN, RISER DIAGRAMS, SYMBOLS,
AND ABBREVIATIONS

E-2 STORAGE TANK ELECTRICAL PLAN

INSTRUMENTATION

I-1 INSTRUMENTATION



LOCATION MAP

ABBREVIATIONS

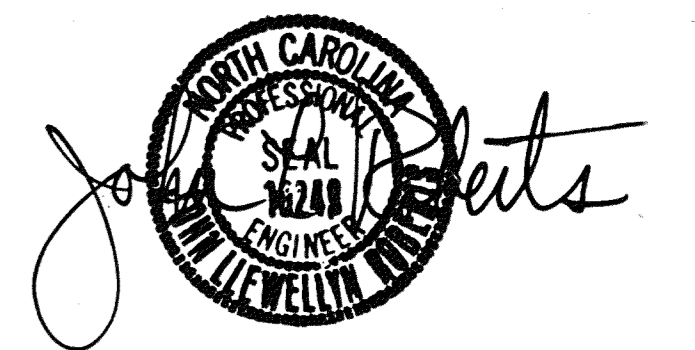
BFV	BUTTERFLY VALVE
BM	BENCH MARK
CJ	CONSTRUCTION JOINT
CTU	CENTRAL TELEMETRY UNIT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
EF	EACH FACE
EL	ELEVATION
EW	EACH WAY
EXP	EXPANSION
JT	JOINT
MAT'L	MATERIAL
MIN	MINIMUM
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PVC	POLYVINYL CHLORIDE
REINF	REINFORCEMENT
RTU	REMOTE TELEMETRY UNIT
SQ	SQUARE
T & B	TOP AND BOTTOM
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
W/	WITH

RECORD DRAWING

These record drawings have been prepared based on information provided by others. The engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

CAMP DRESSER & McKEE

Date: January 1995



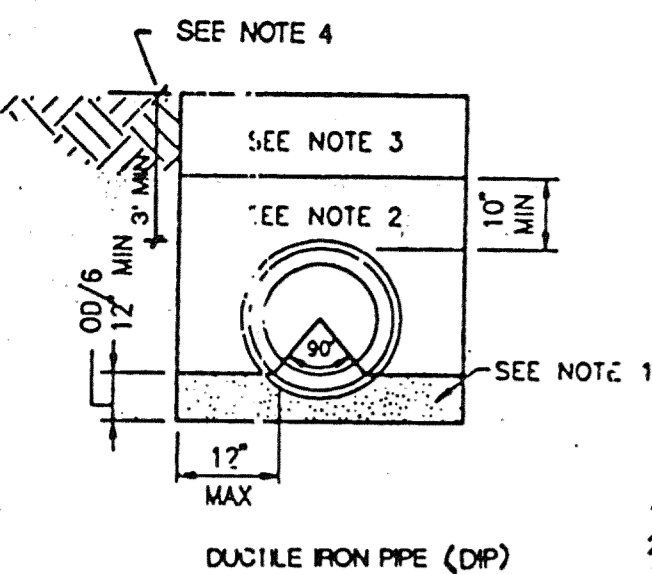
**CAMP DRESSER & McKEE
RALEIGH, NORTH CAROLINA**

6384-5

environmental engineers, scientists,
planners, & management consultants

CDM

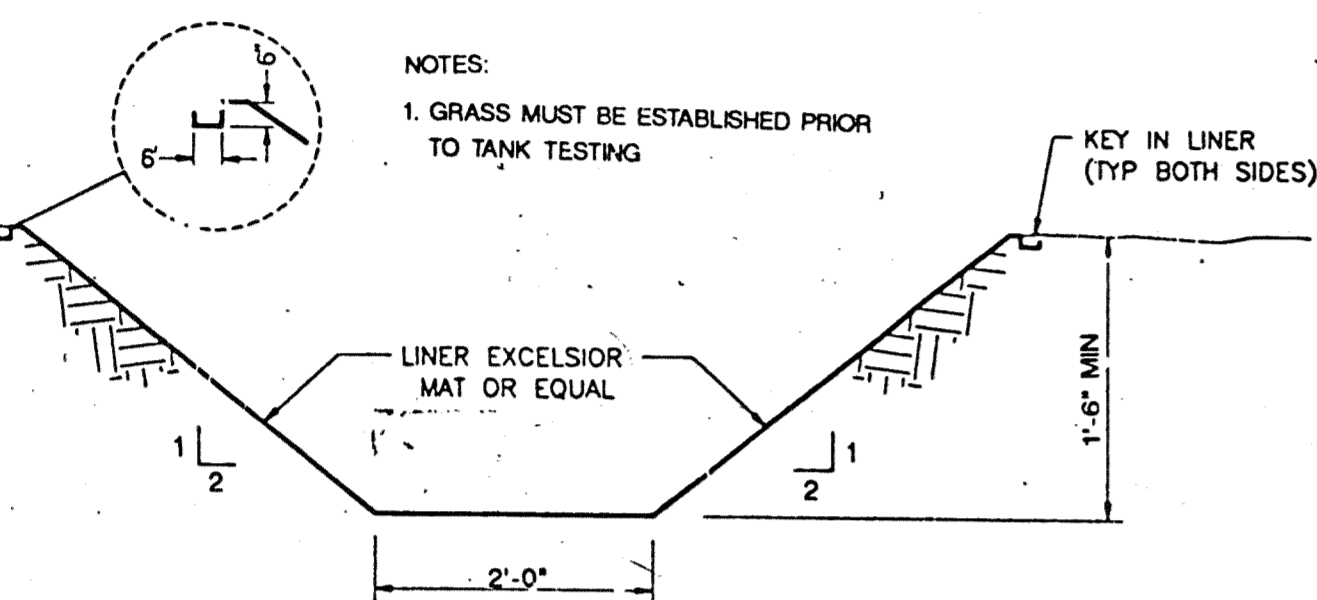
DW-10511



- NOTES:
1. NO. 67 STONE OR CLEAN SAND
 2. NCDOT CLASS 1 BACKFILL
 3. COMMON FILL TYPE 1
 4. FOR DIP DRAIN PIPE, MIN COVER IS 6 INCHES

PIPE BEDDING DETAILS

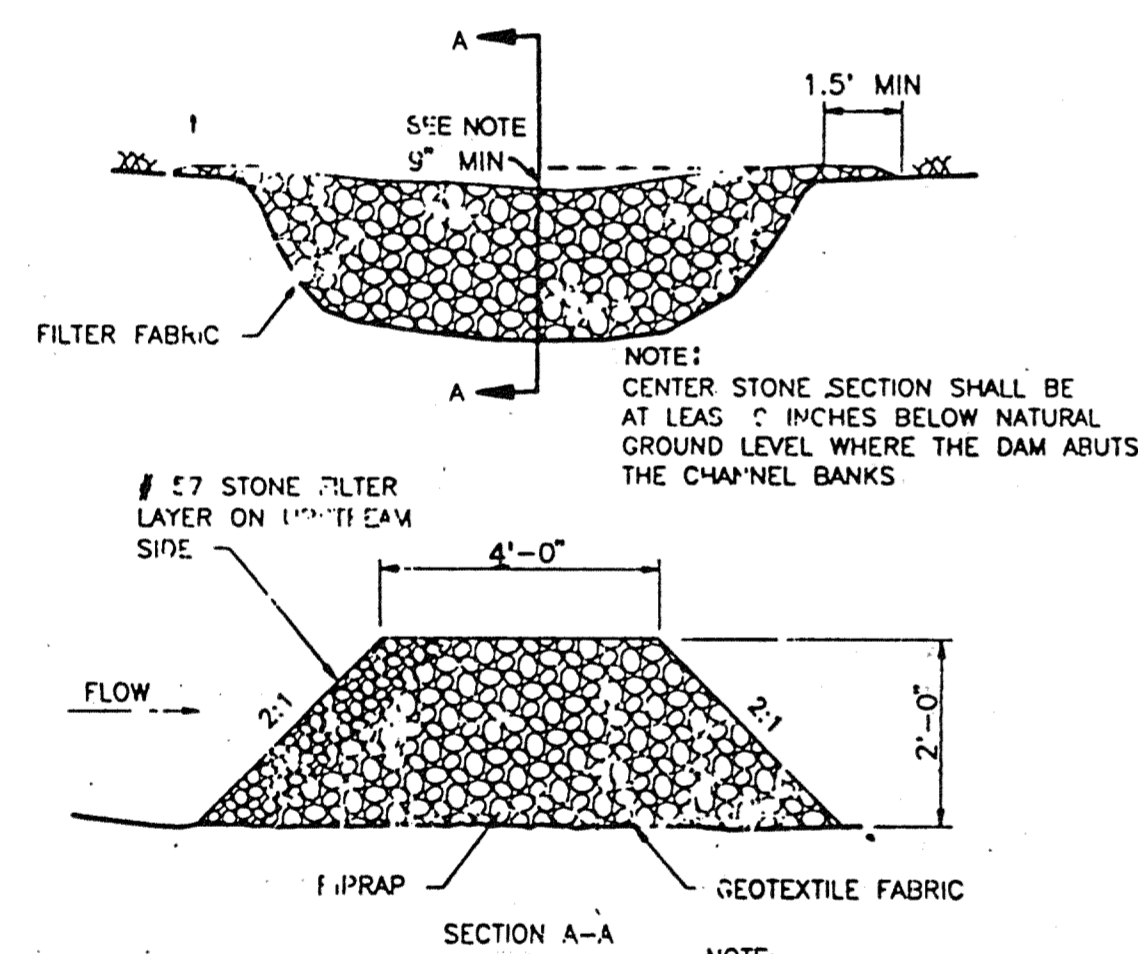
DETAIL A NOT TO SCALE STD



- NOTES:
1. GRASS MUST BE ESTABLISHED PRIOR TO TANK TESTING

DRAINAGE DITCH

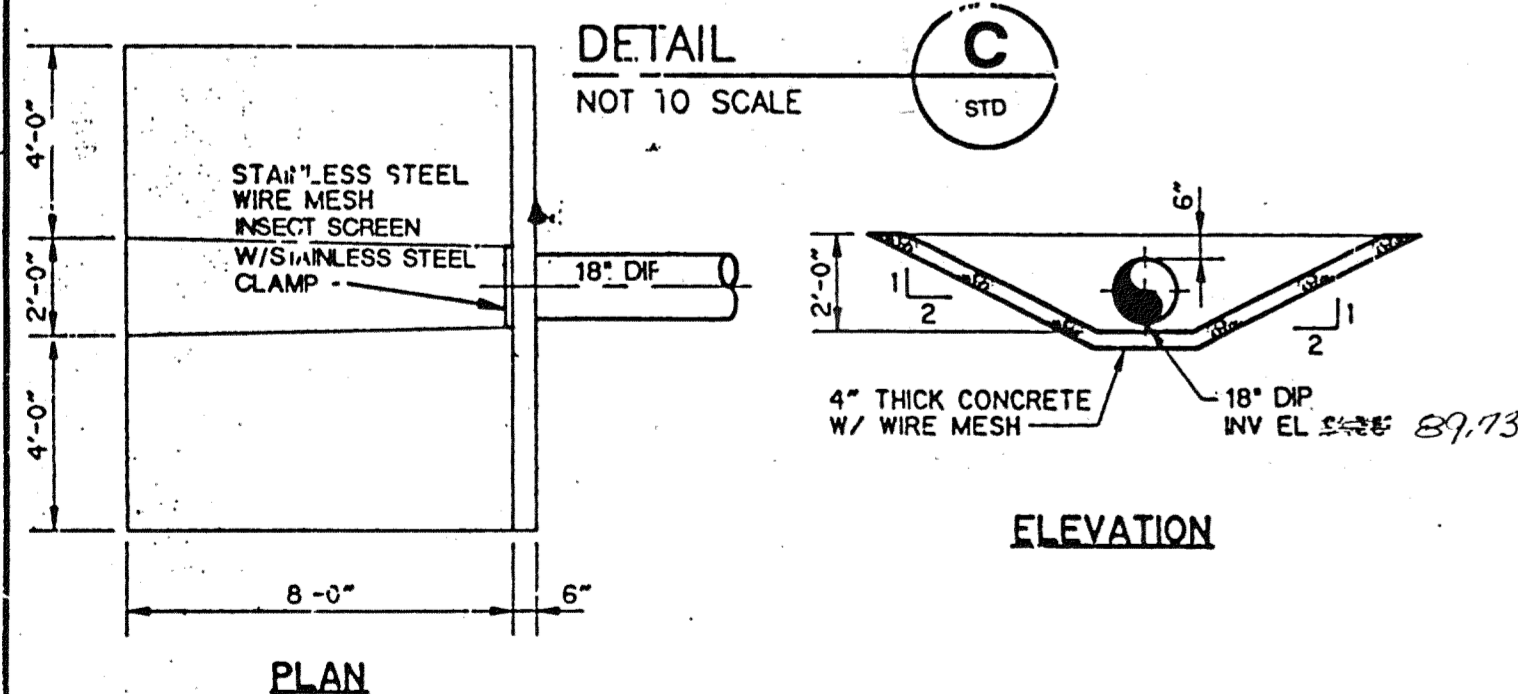
DETAIL B NOT TO SCALE STD



- NOTE:
1. CENTER STONE SECTION SHALL BE AT LEAST 6 INCHES BELOW NATURAL GROUND LEVEL WHERE THE DAM ABUTS THE CHANNEL BANKS

TEMPORARY CHECK DAM/SEDIMENT TRAP

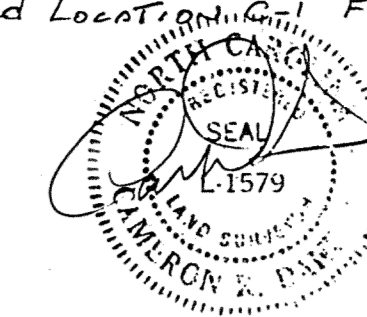
DETAIL C NOT TO SCALE STD



CONCRETE OUTLET PAD

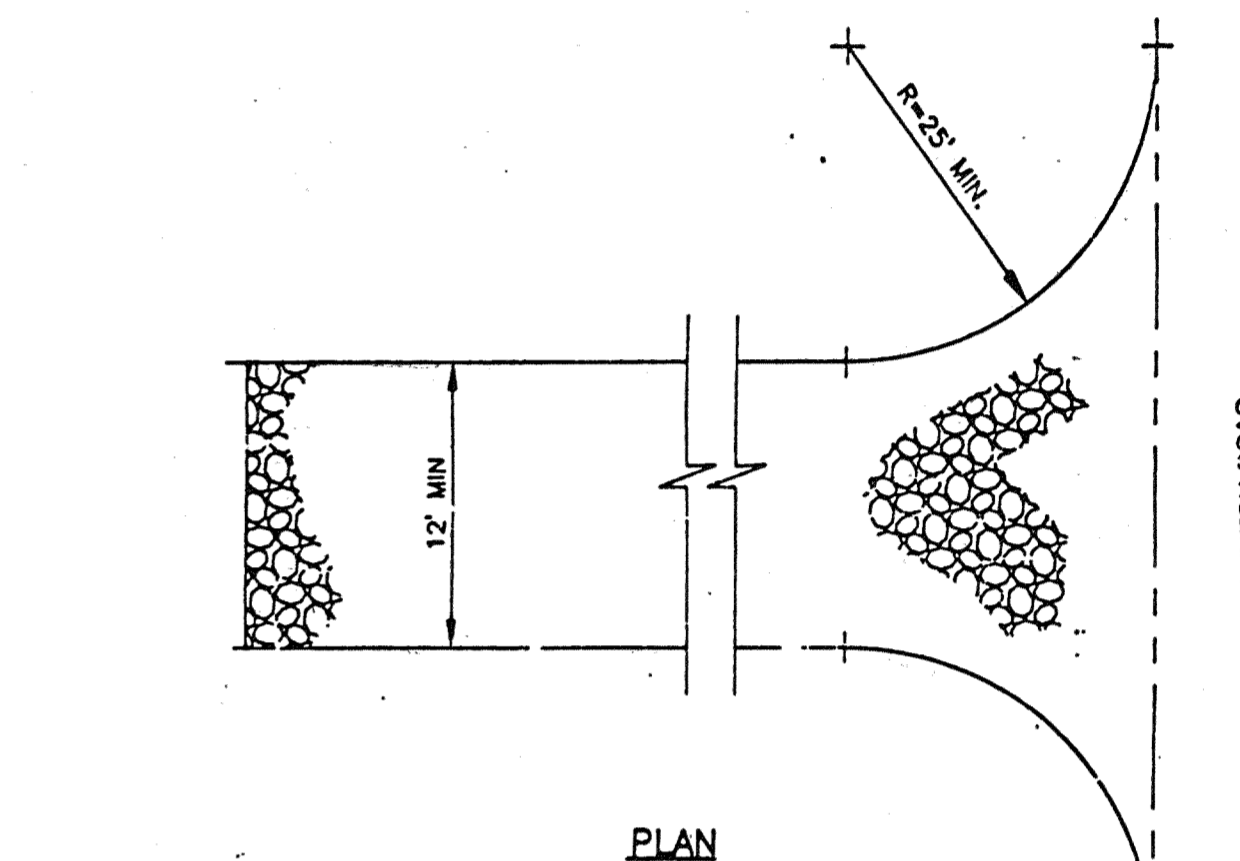
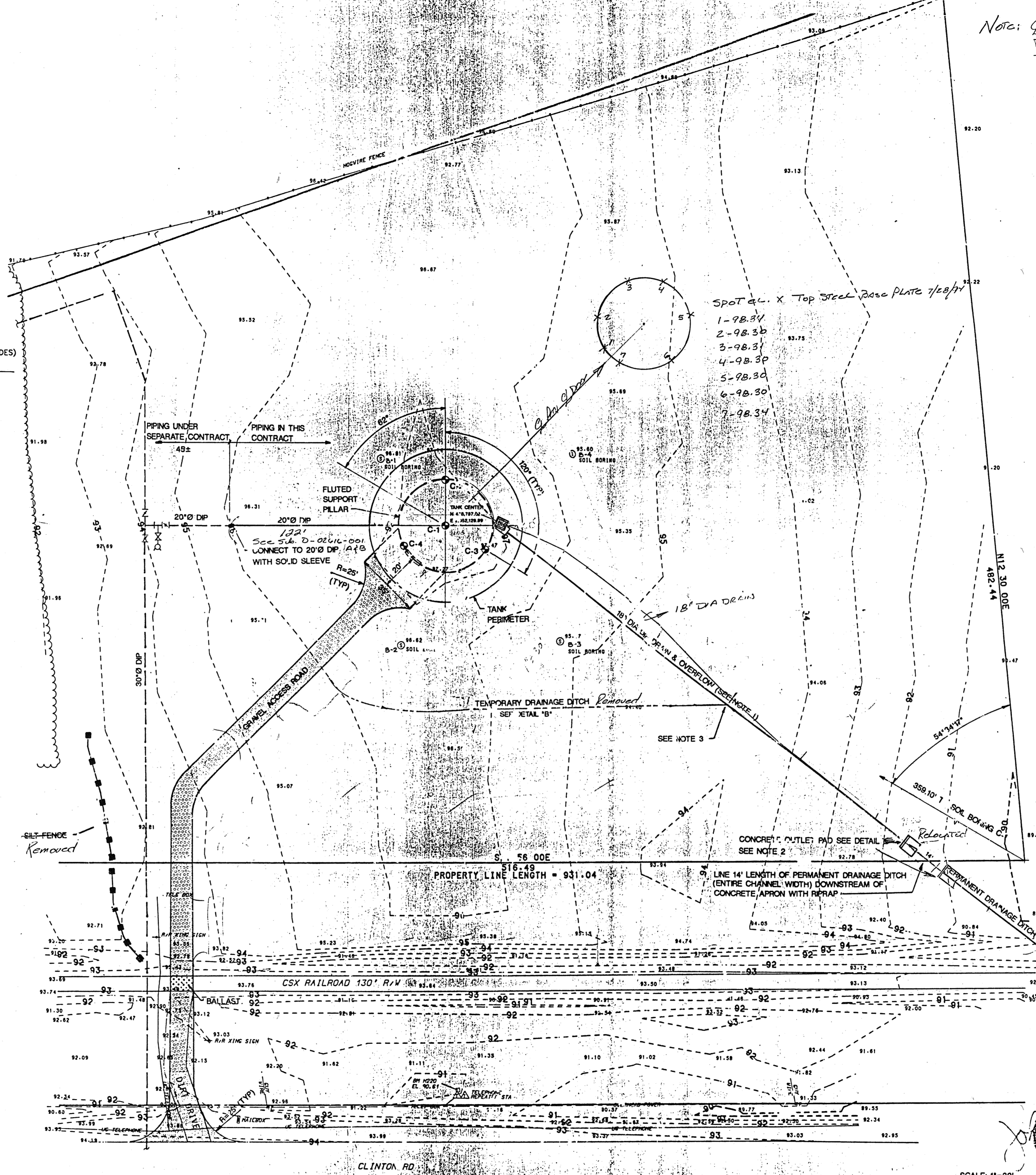
DETAIL E NOT TO SCALE STD

NOTE: Tank coordinates provided by PWC
Drawing DW 9753A Dated 3/19/92 Boring C-1
Tank AS-BUILT $\pm 1/2$ " AS SHOWN
Verified Location from data provided by PWC 2/93

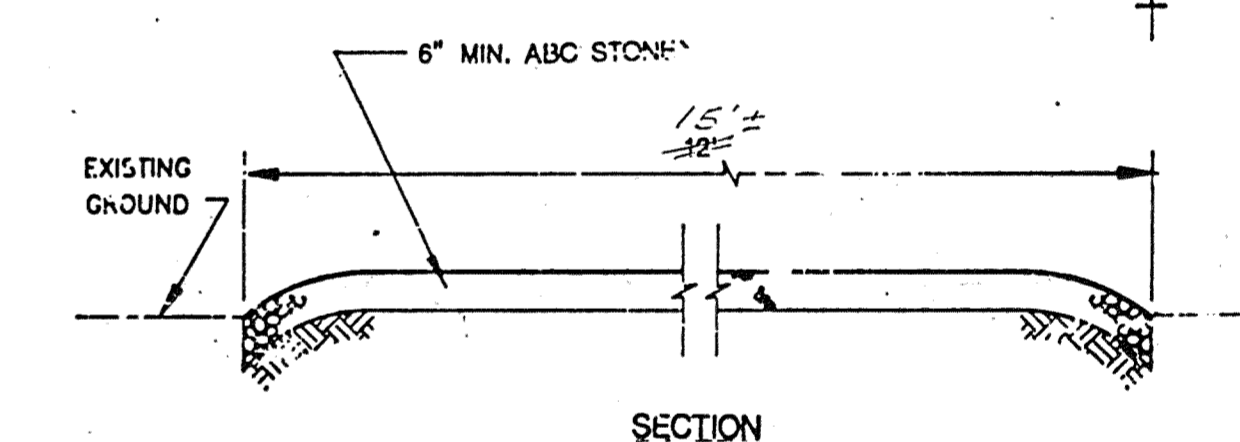


NOTES:

1. PROVIDE TEMPORARY DRAINAGE DITCH AT LOCATION OF 18" DIA DIP DRAIN PRIOR TO CONSTRUCTION OF TANK FOUNDATION; TEMPORARY DRAINAGE DITCH TO REMAIN UNTIL TANK ERECTION IS COMPLETED.
2. PROVIDE TEMPORARY CHECK DAM AT LOCATION OF 18" DIA DIP OUTLET PRIOR TO CONSTRUCTION OF TANK FOUNDATION; CHECK DAM TO REMAIN UNTIL TANK ERECTION IS COMPLETED.
3. CONNECT TEMPORARY DRAINAGE DITCH TO TEMPORARY DRAINAGE DITCH AT 18" DIP LOCATION (SEE NOTE 1) FOR SEDIMENTATION AND EROSION CONTROL DURING CONSTRUCTION.
4. PROVIDE 6" MINIMUM COVER ON 18" DIP DRAIN.



PLAN

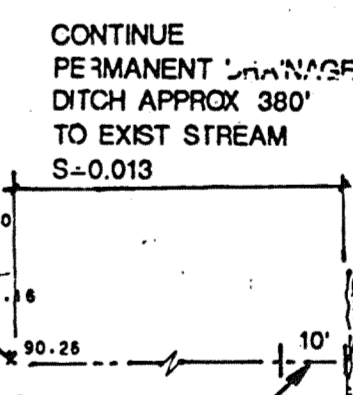


SECTION

- NOTE:
1. PROVIDE APPROPRIATE TRANSITION BETWEEN GRAVEL ROAD AND PAVEMENT ON CLINTON ROAD AND GRAVEL ROAD AND TANK ACCESS RAMP

GRAVEL ACCESS ROAD

DETAIL D NOT TO SCALE STD



PWC PUBLIC WORKS COMMISSION OF THE CITY OF FAYETTEVILLE, NC	
CLINTON RD. ELEVATED STORAGE TANK SITE	
DRAWN BY	DATE 2-20-95
CHECKED BY	SCALE AS SHOWN
APPROVED BY	DW-10511

- SYMBOLS
- 1. BUTTERFLY VALVE
 - 2. GATE VALVE
 - 3. HYDRANT
 - 4. SOIL BORING BY GODWIN-JORDAN & ASSOC.
 - 5. SOIL BORING BY GEOTECHNOLOGIES, INC.

PARTIAL TOPO SURVEY OF PWC WATER TANK PROPERTY 08433/287 TRACT 2, SURVEYING & MAPPING BY PWC WATER/SEWER ENGINEERING DEPT

SCALE: 1"=30'

As Built
SITE AND YARD PIPING PLAN
8/29/94 By Popowicz, R. R.

PROJECT NO.
6384-5
SHEET NO.
C-1

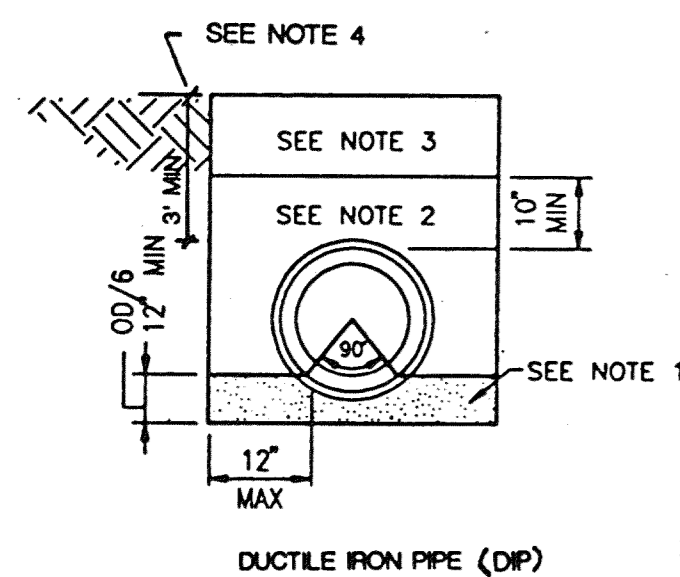
DESIGNED BY	K. HULL
DRAWN BY	M. BASS
SHEET CHK'D BY	K. HULL
CROSS CHK'D BY	K. HULL
APPROVED BY	[Signature]
DATE	OCTOBER 1992

CAMP DRESSER & MCKEE

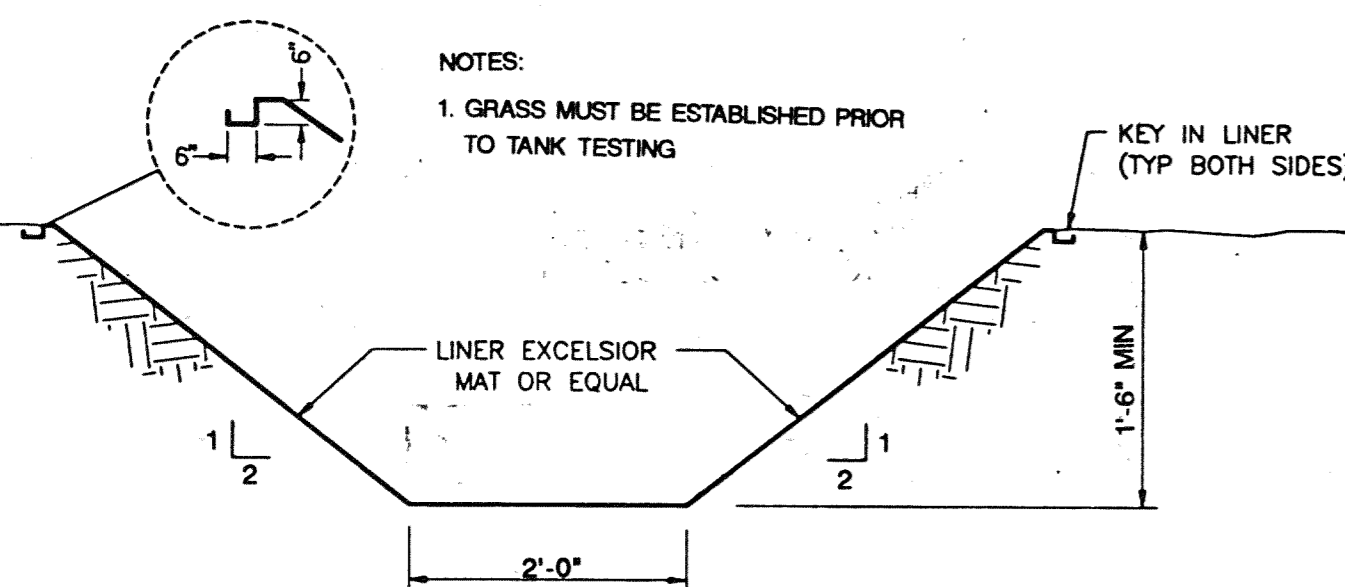
PUBLIC WORKS COMMISSION
CITY OF FAYETTEVILLE

CDM

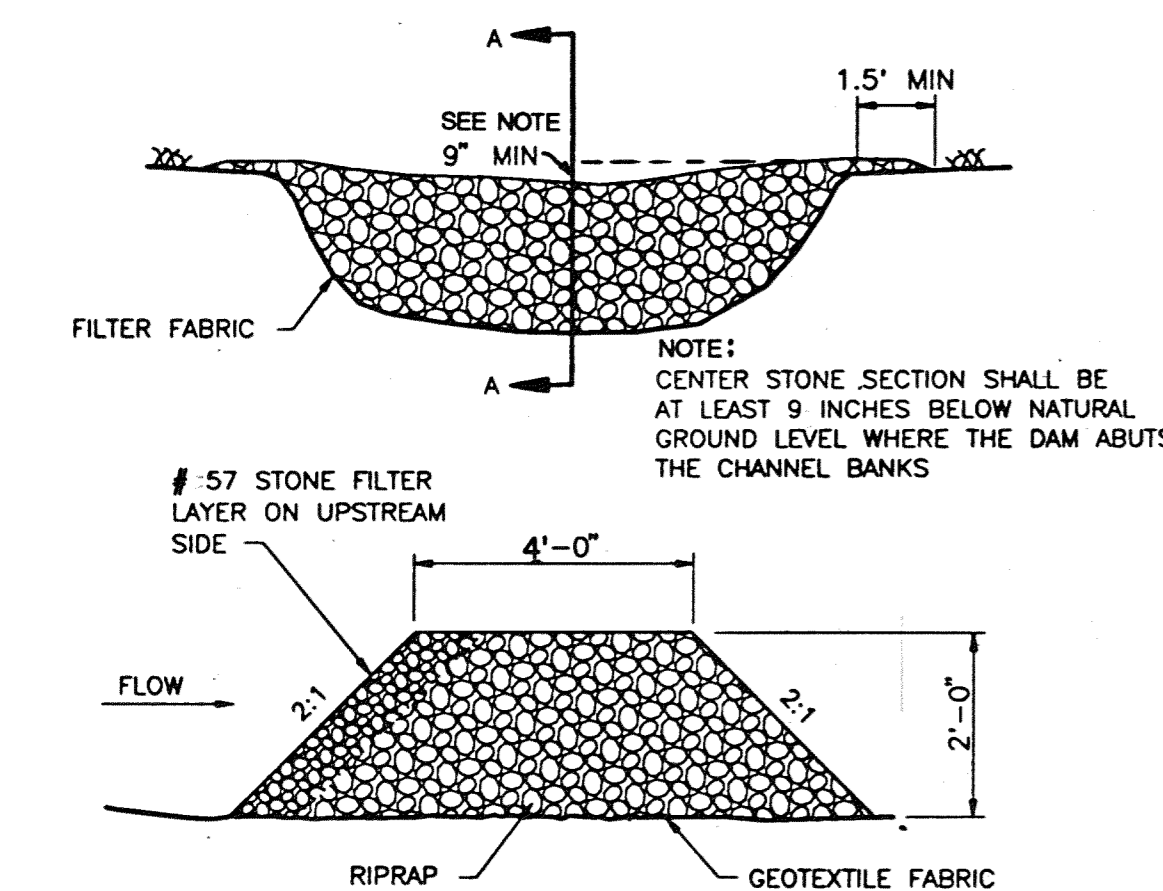
CLINTON ROAD ELEVATED STORAGE TANK



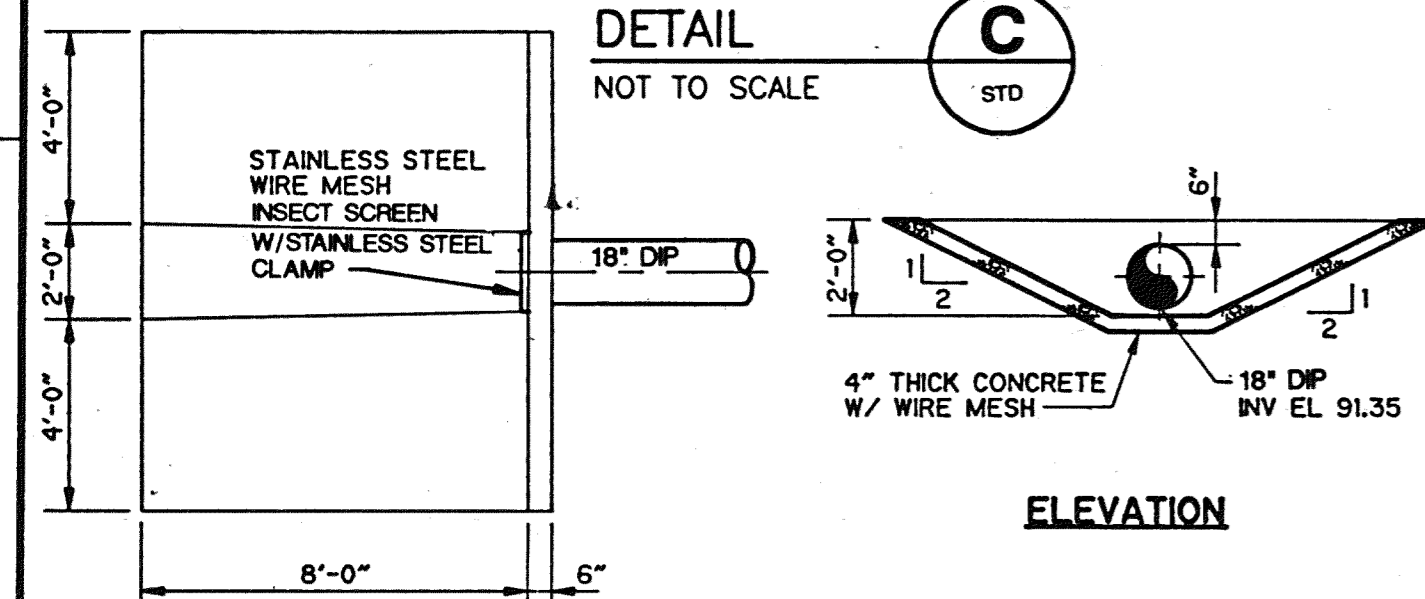
PIPE BEDDING DETAILS
DETAIL A
NOT TO SCALE



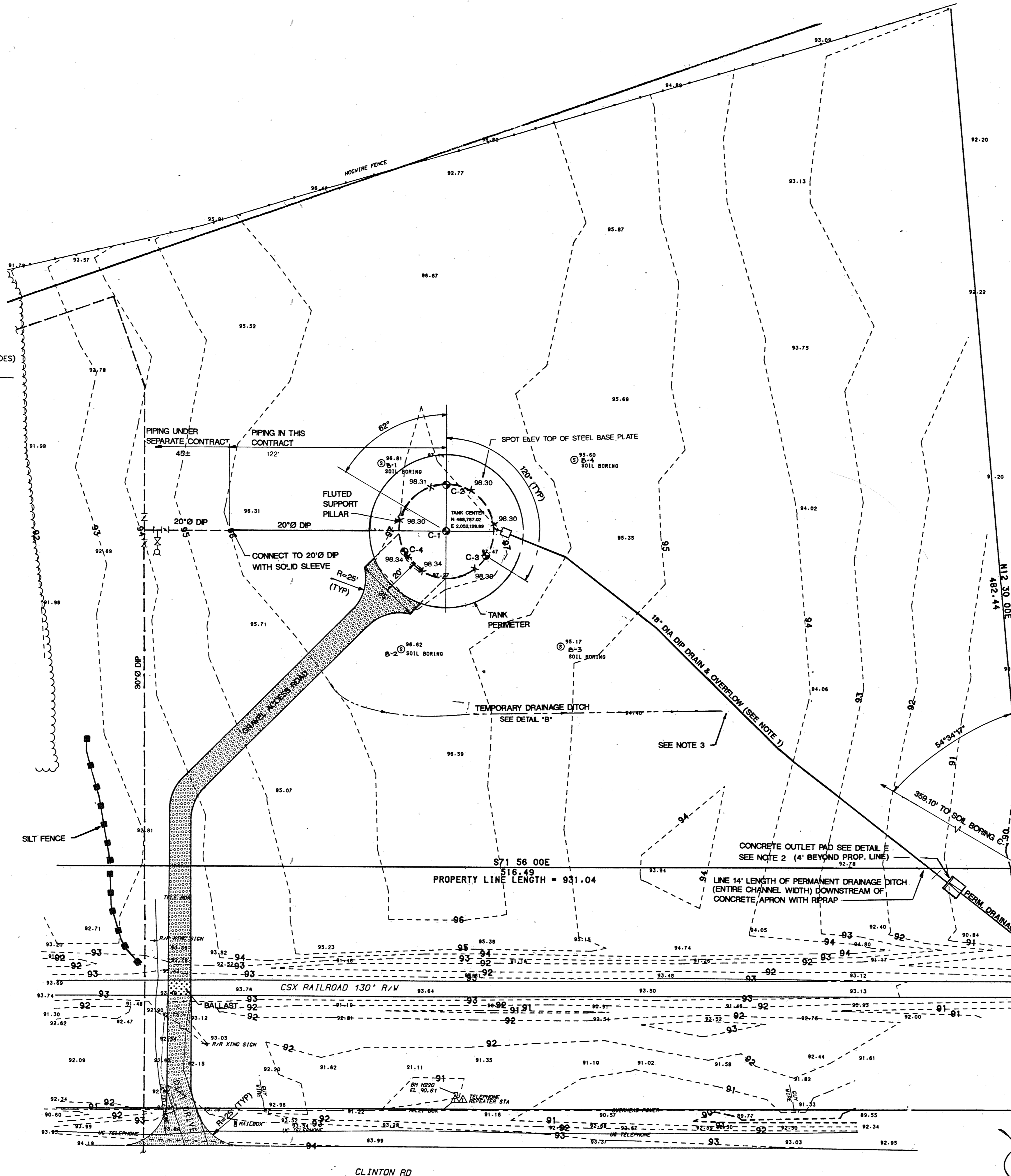
DRAINAGE DITCH
DETAIL B
NOT TO SCALE



TEMPORARY CHECK DAM/SEDIMENT TRAP
DETAIL C
NOT TO SCALE



CONCRETE OUTLET PAD
DETAIL E
1/4\"/>



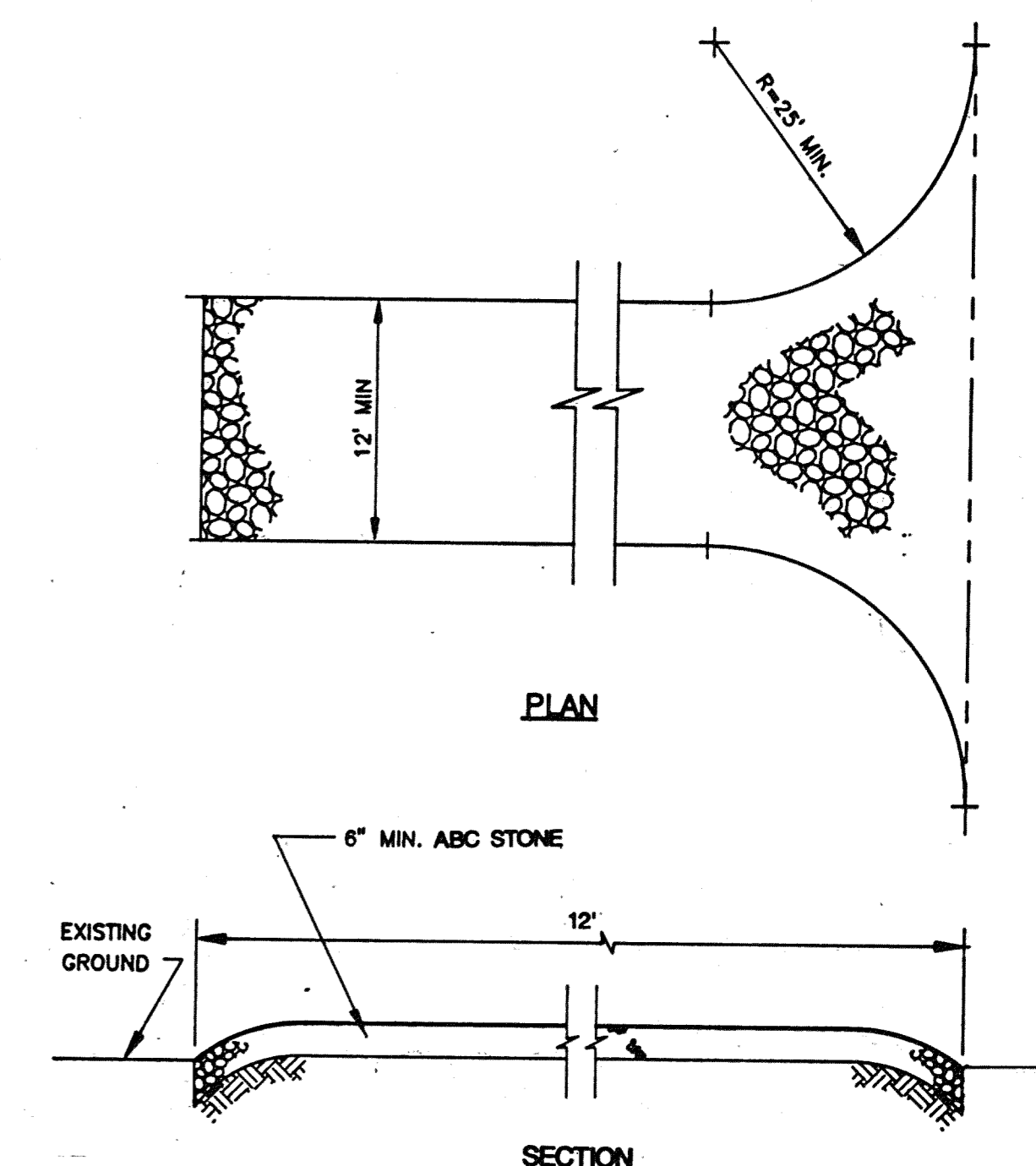
RECORD DRAWING

These record drawings have been prepared based on information provided by others. The engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

CAMP DRESSER & MCKEE Date: January 1992

NOTES:

1. PROVIDE TEMPORARY DRAINAGE DITCH AT LOCATION OF 18" DIA DIP DRAIN PRIOR TO CONSTRUCTION OF TANK FOUNDATION; TEMPORARY DRAINAGE DITCH TO REMAIN UNTIL TANK ERECTION IS COMPLETED.
2. PROVIDE TEMPORARY CHECK DAM AT LOCATION OF 18" DIA DIP OUTLET PRIOR TO CONSTRUCTION OF TANK FOUNDATION; CHECK DAM TO REMAIN UNTIL TANK ERECTION IS COMPLETED.
3. CONNECT TEMPORARY DRAINAGE DITCH TO TEMPORARY DRAINAGE DITCH AT 18" DIP LOCATION (SEE NOTE 1) FOR SEDIMENTATION AND EROSION CONTROL DURING CONSTRUCTION.
4. PROVIDE 6" MINIMUM COVER ON 18" DIP DRAIN.



GRAVEL ACCESS ROAD
DETAIL D
NOT TO SCALE

SYMBOLS

- 1/ BUTTERFLY VALVE
- 2/ GATE VALVE
- 3/ HYDRANT
- 4/ SOIL BORING BY GOOWN-JORDAN & ASSOC.
- 5/ SOIL BORING BY GEOTECHNOLOGIES, INC.

PARTIAL TOPO SURVEY OF PWC WATER TANK PROPERTY DB433/287 TRACT 2. SURVEYING & MAPPING BY PWC WATER/SEWER ENGINEERING DEPT.

SCALE: 1"=30'

SITE AND YARD PIPING PLAN

PROJECT NO.
6304-5

SHEET NO.
C-1

DESIGNED BY: K. HULL
DRAWN BY: M. BASS
SHEET CHK'D BY: K. HULL
CROSS CHK'D BY: K. HULL
APPROVED BY: [Signature]
DATE: OCTOBER 1992

CAMP DRESSER & MCKEE

environmental engineers, scientists,
planners, & management consultants

CDM

CLINTON ROAD ELEVATED STORAGE TANK

PUBLIC WORKS COMMISSION
OF THE
CITY OF FAYETTEVILLE

REV. NO.	DATE	DRWN	CHKD	REMARKS
1/95	TMB	KSH		RECORD DRAWING

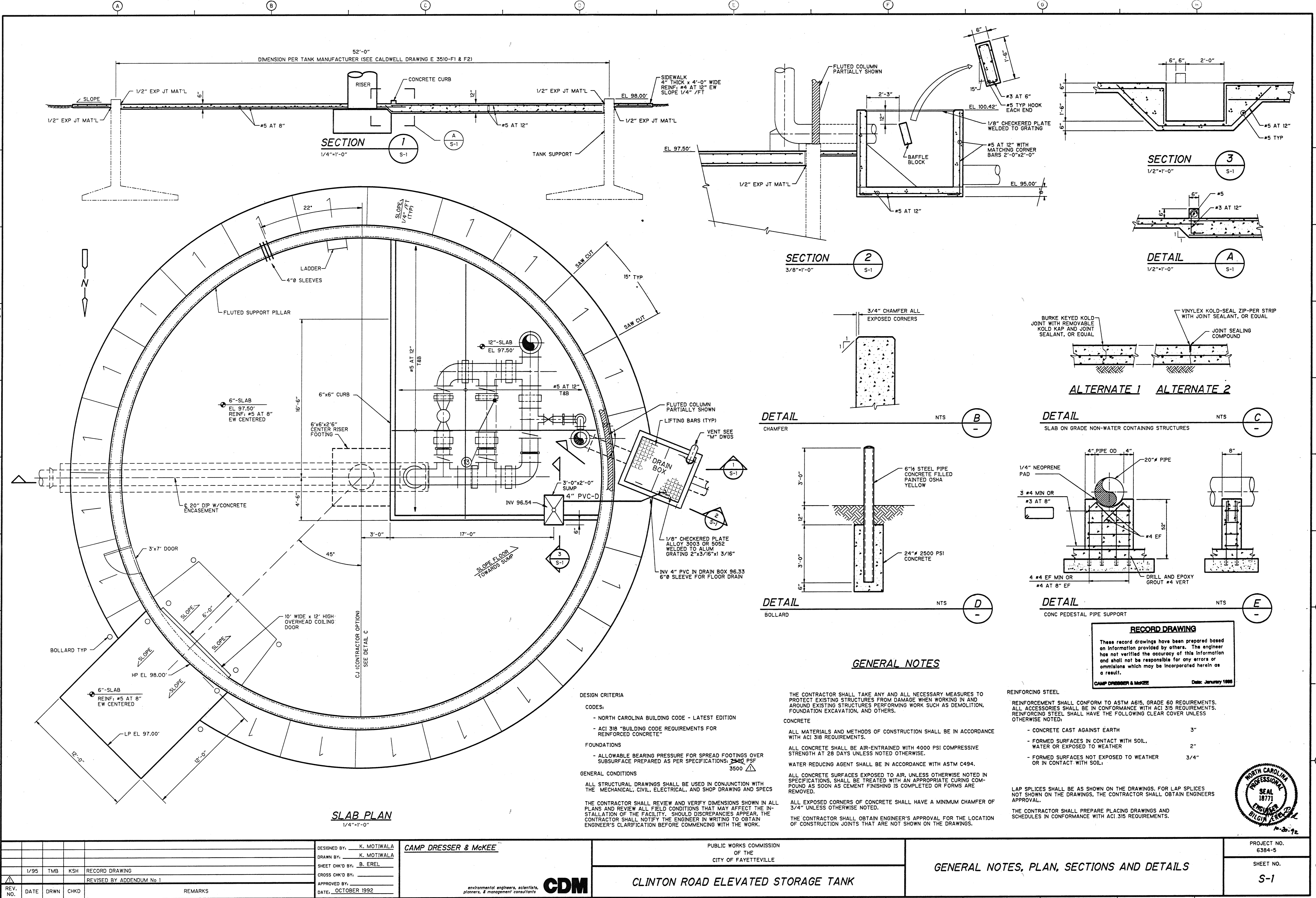
Kim Nguyen

12:00:58

12/07/94 09:45:45

6384501

O:\AES\6384-005\STRU



REV. NO.	DATE	DRWN	CHKD	REMARKS
1/95	TMB	KSH		RECORD DRAWING
				CROSS CHK'D BY:
				APPROVED BY:
				DATE: OCTOBER 1992

DESIGNED BY:	K. MOTIWALA
DRAWN BY:	K. MOTIWALA
SHEET CHK'D BY:	B. EREL
CROSS CHK'D BY:	
APPROVED BY:	
DATE:	OCTOBER 1992

CAMP DRESSER & McKEE

environmental engineers, scientists,
planners, & management consultants

CDM

PUBLIC WORKS COMMISSION
OF THE
CITY OF FAYETTEVILLE

CLINTON ROAD ELEVATED STORAGE TANK

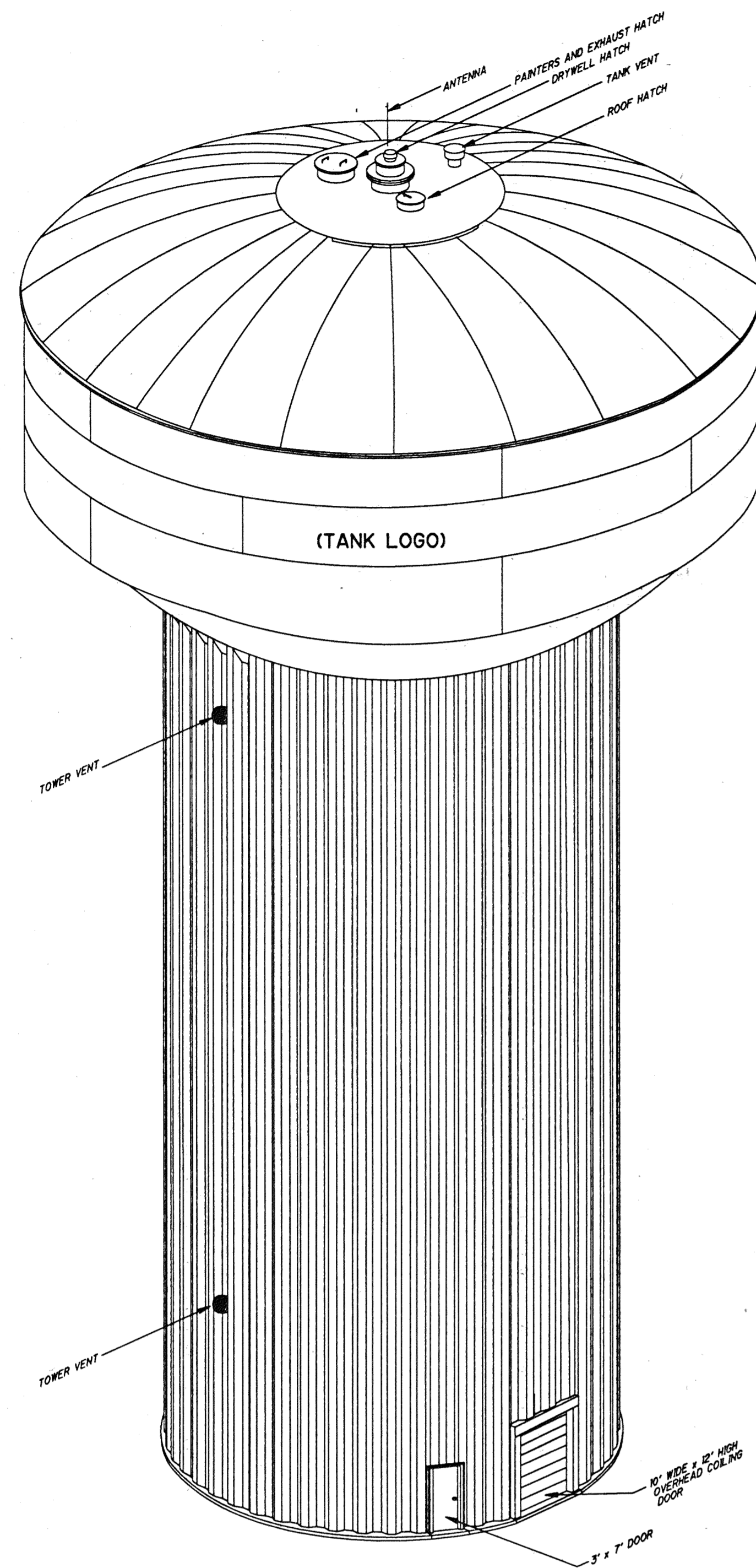
GENERAL NOTES, PLAN, SECTIONS AND DETAILS

PROJECT NO.
6384-5

SHEET NO.
S-1

NORTH CAROLINA
PROFESSIONAL
SEAL
18771
ENGINEER
JULIAN K. EREL
12-20-92

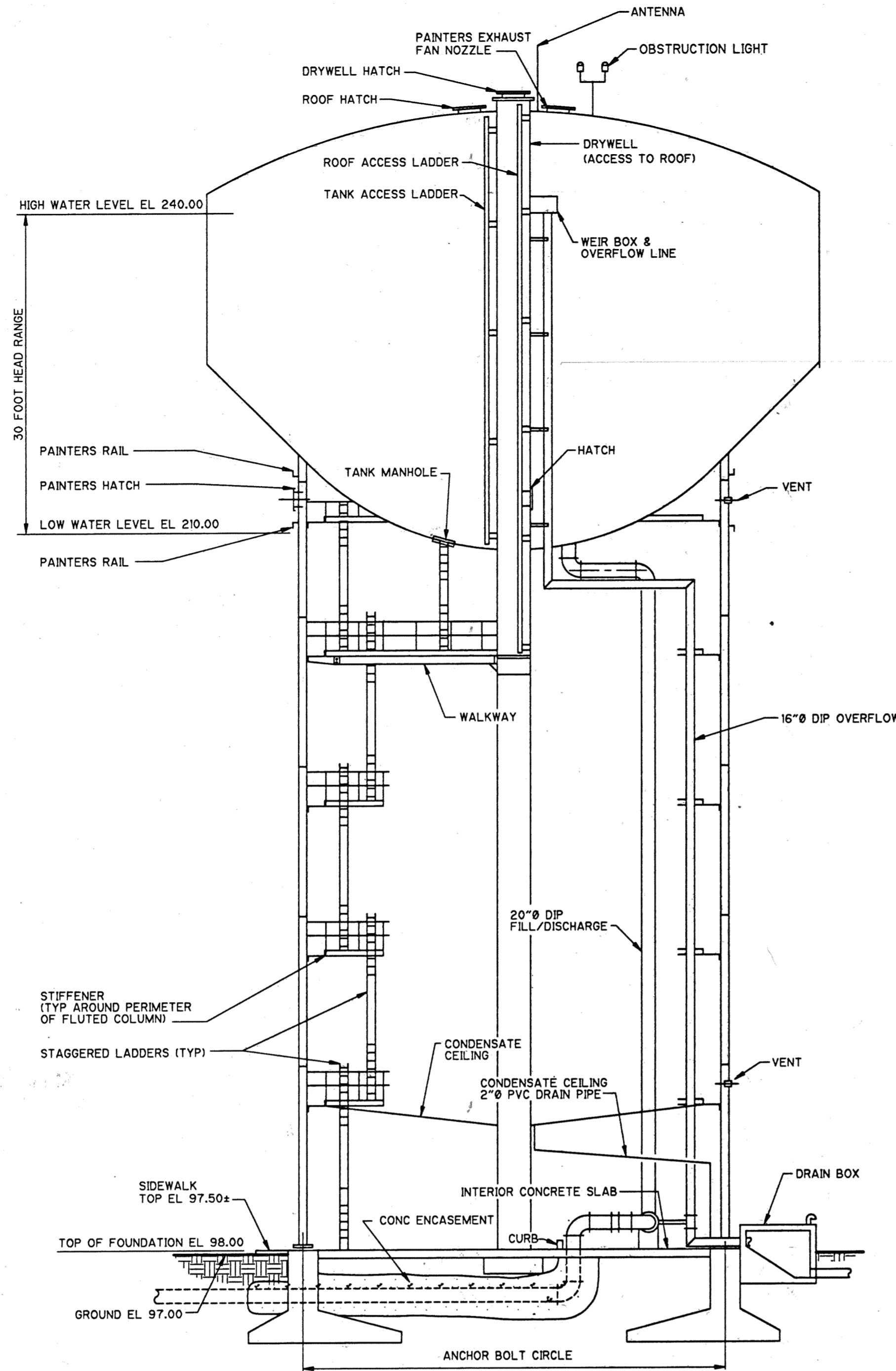
DW-10511



ELEVATED STORAGE TANK

ELEVATION

NOT TO SCALE



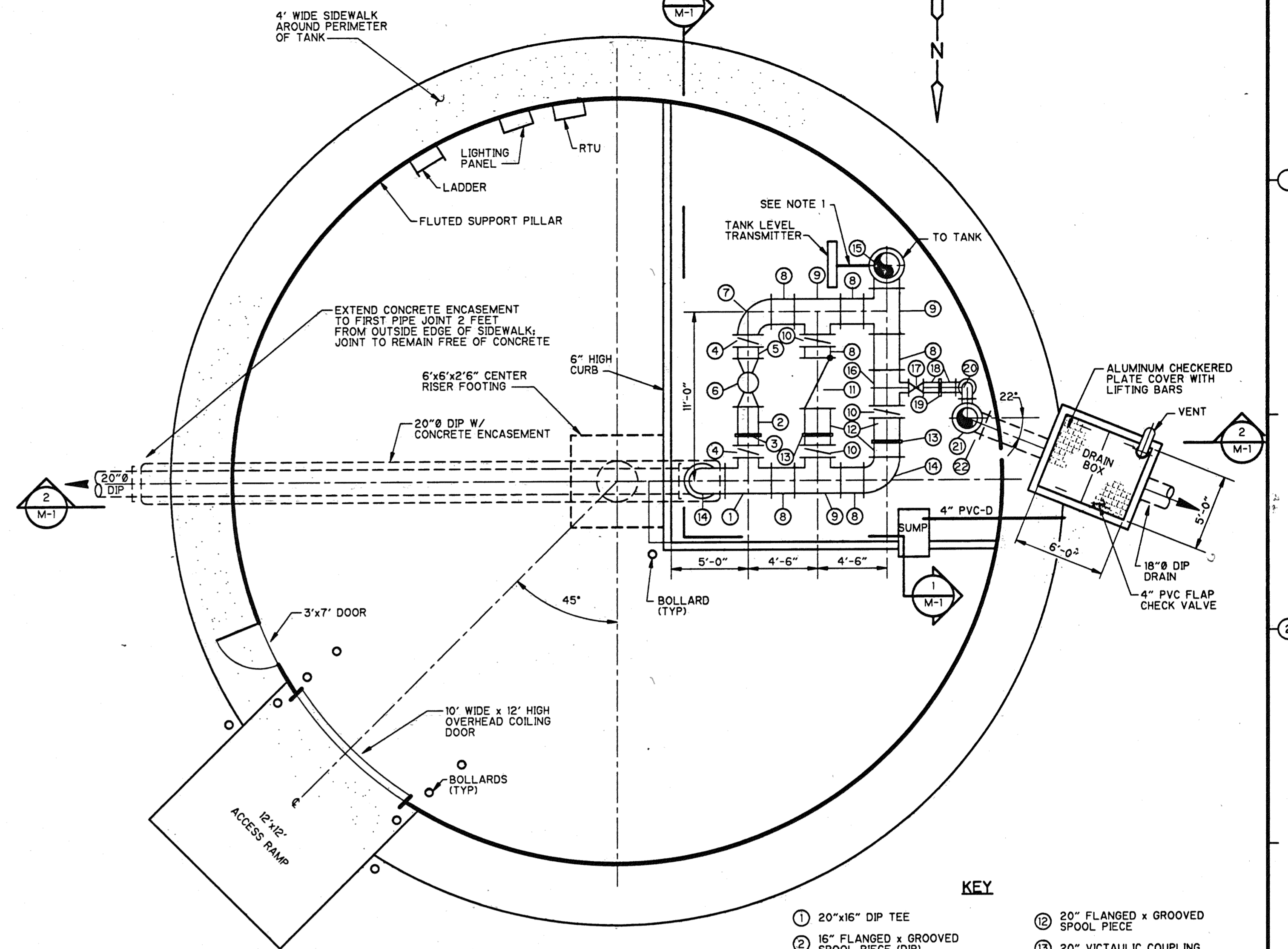
NOTE

LADDERS AND PLATFORMS ARE ATTACHED TO WALL. SECTION IS ROTATED FOR CLARITY.

SECTION 2

NOT TO SCALE

M-1



NOTE

- 1- INSTALL 1/2" COPPER TUBING W/ BALL VALVE, BLOW OFF & PURGE VALVE AT EL 102.50 ON 20" DIP TO TANK LEVEL TRANSMITTER, HEAT TRACE TUBING AND VALVES.
- 2- ALTITUDE VALVE CONTROLS (e.g. SOLINOID VALVES) NOT SHOWN FOR CLARITY; HEAT TRACE CONTROL VALVES AND TUBING
- 3- PIPE SUPPORTS NOT SHOWN FOR CLARITY (SEE STRUCTURAL).

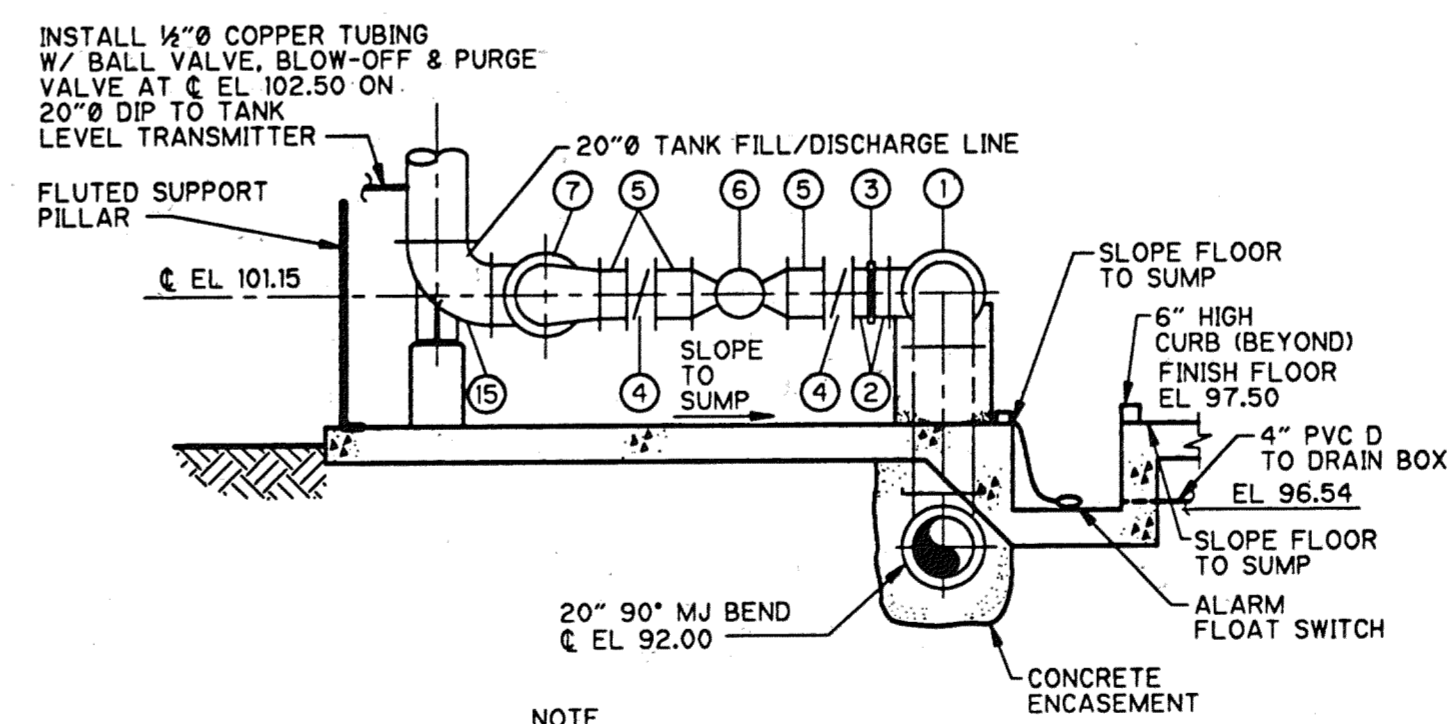
FLUTED SUPPORT PILLAR

PLAN

3/16" = 1'-0"

KEY

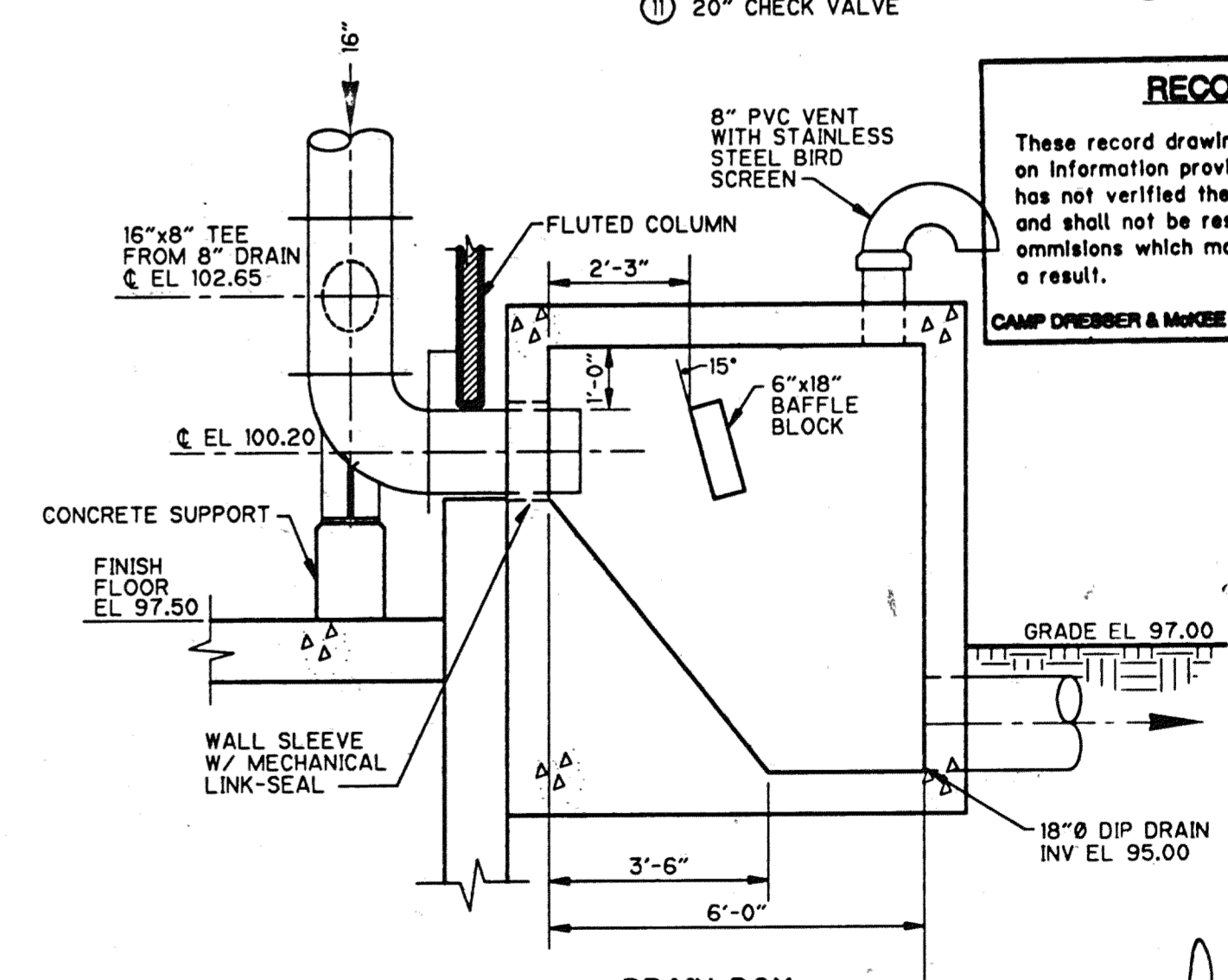
- 1 20"x16" DIP TEE
- 2 16" FLANGED x GROOVED SPOOL PIECE (DIP)
- 3 16" VICTAULIC COUPLING
- 4 16" BUTTERFLY VALVE
- 5 16" FLANGED SPOOL PIECE (DIP)
- 6 16" ALTITUDE VALVE
- 7 16"x20" INCREASING 90° BEND (DIP)
- 8 20" SPOOL PIECE (DIP)
- 9 20"x20" DIP TEE
- 10 20" BUTTERFLY VALVE
- 11 20" CHECK VALVE
- 12 20" FLANGED x GROOVED SPOOL PIECE
- 13 20" VICTAULIC COUPLING
- 14 20" 90° BEND (DIP)
- 15 20" 90° BASE BEND (DIP)
- 16 20"x8" DIP TEE
- 17 8" GATE VALVE
- 18 8" FLANGED x GROOVED SPOOL PIECE
- 19 8" VICTAULIC COUPLING
- 20 8" 90° BEND (DIP)
- 21 16"x8" DIP TEE
- 22 16" 90° BEND (DIP)



SECTION 1

3/16" = 1'-0"

M-1



DRAIN BOX

ELEVATION

3/8" = 1'-0"

RECORD DRAWING

These record drawings have been prepared based on information provided by others. The engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

CAMP DRESSER & MCKEE

Date: January 1995



REV. NO.	DATE	DRWN	CHKD	REMARKS
1/95	TMB	KSH		RECORD DRAWING

DESIGNED BY:	K. HULL
DRAWN BY:	M. BASS
SHEET CHK'D BY:	K. HULL
CROSS CHK'D BY:	K. HULL
APPROVED BY:	
DATE:	OCTOBER 1992

CAMP DRESSER & MCKEE

environmental engineers, scientists, planners, & management consultants



CLINTON ROAD ELEVATED STORAGE TANK

PUBLIC WORKS COMMISSION OF THE CITY OF FAYETTEVILLE

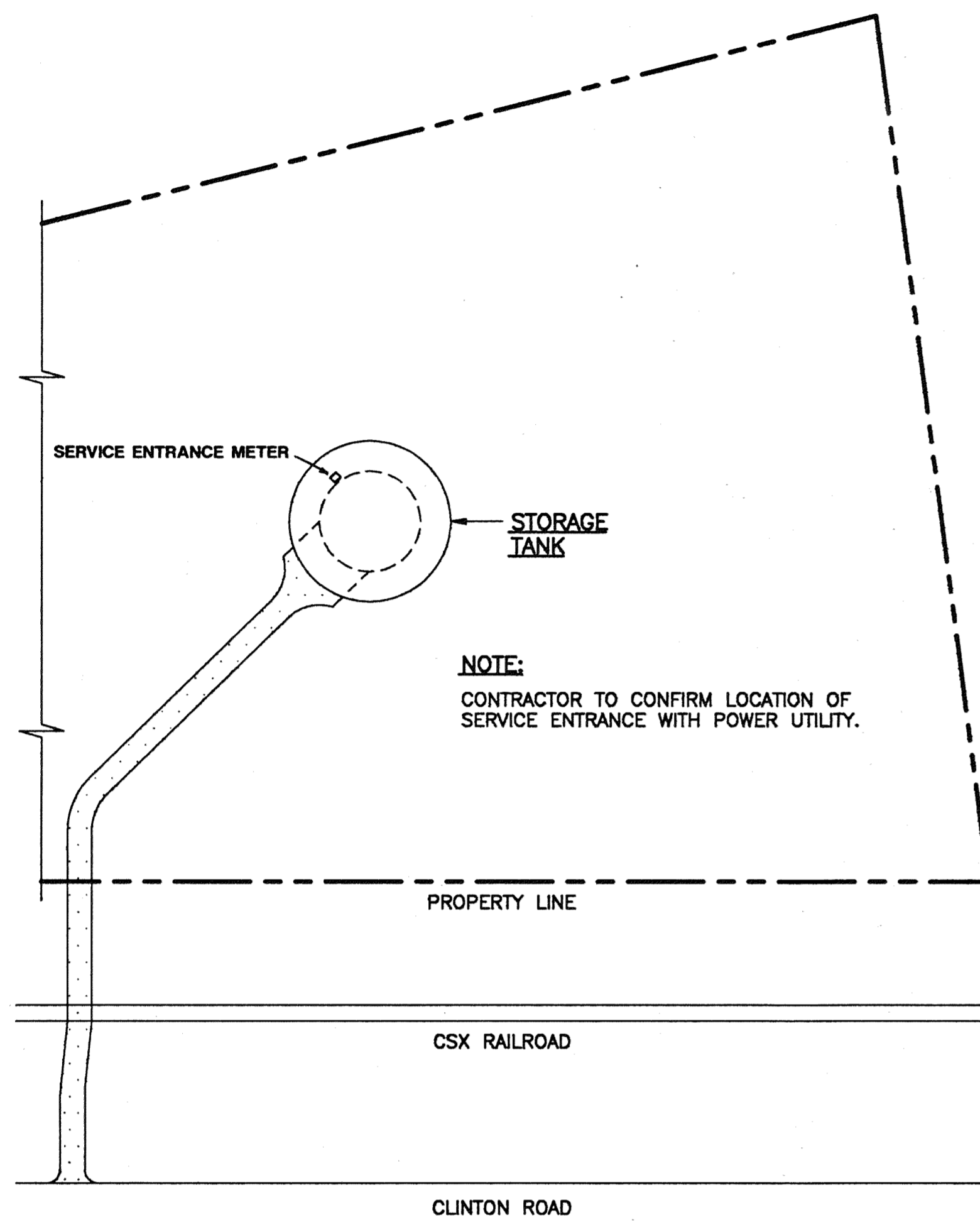
ELEVATED STORAGE TANK ELEVATION, PLAN AND SECTIONS

PROJECT NO. 6384-5

SHEET NO.

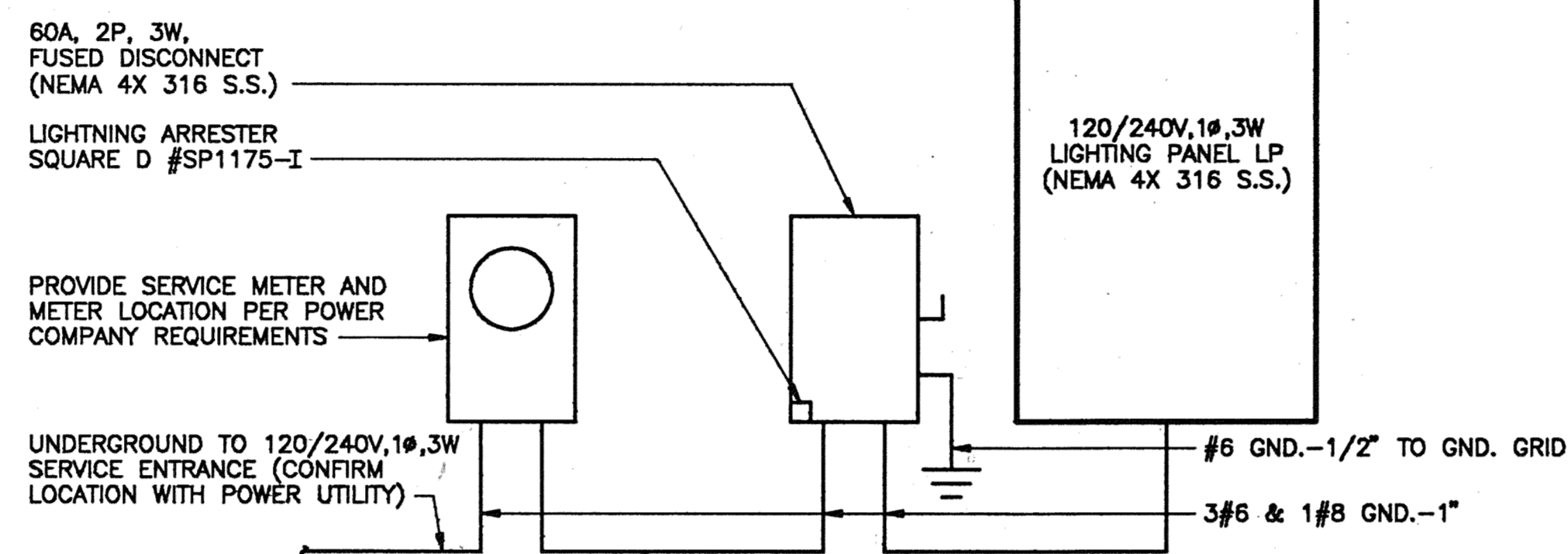
M-1

DW-10511

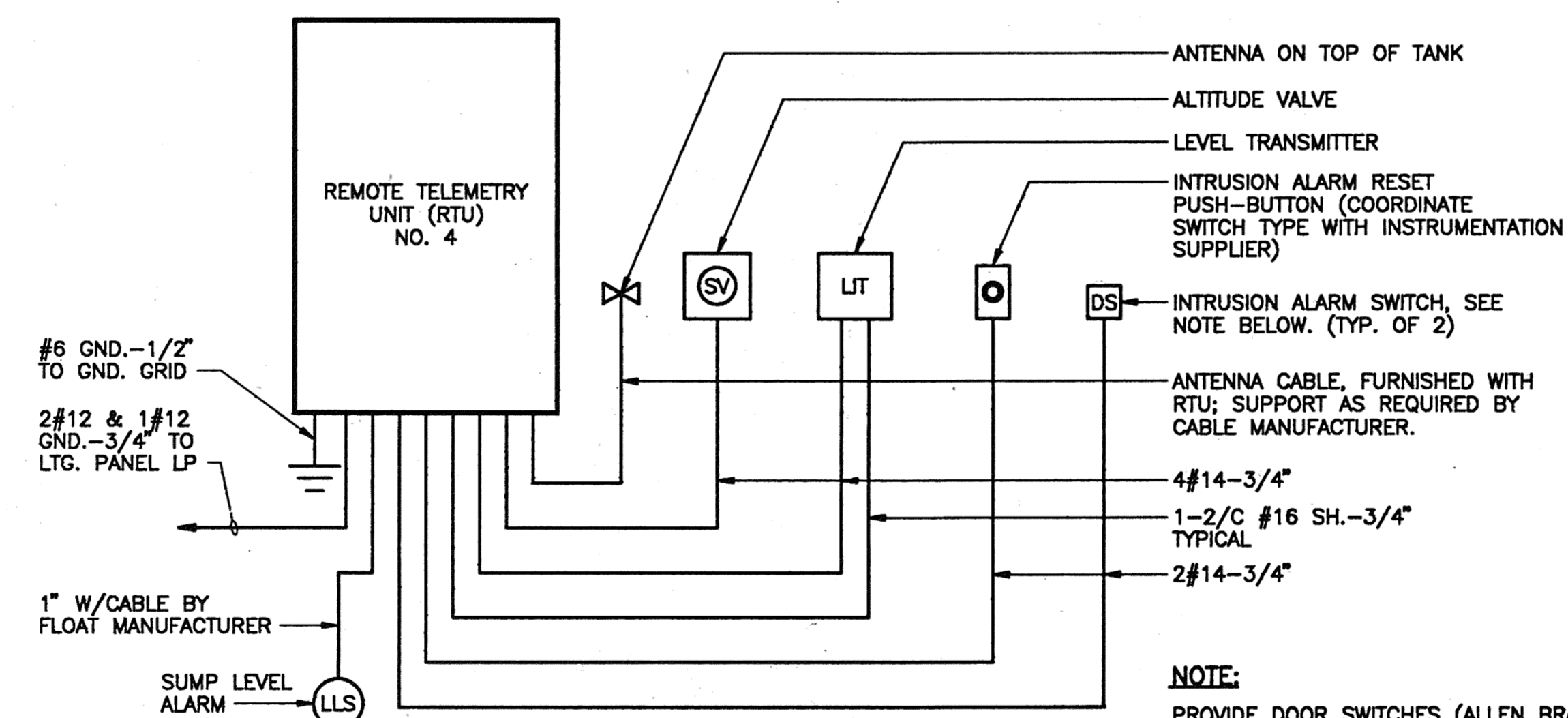


PLAN
SCALE: 1"=60'

PANEL: LP		BUS: 100A, MLO		VOLTAGE: 120/240V, 1Ø, 3W	
MOUNTING: SURFACE		POLES: 20			
LOCATION: INTERIOR TANK BASE		REMARKS:			
CIR. NO.	DESCRIPTION	TRIP	POLES	REMARKS	
1-3	MISCELLANEOUS LIGHTING	20	1		
4-8	MISCELLANEOUS RECEPTACLES	20	1		
9	LEVEL TRANSMITTER	20	1		
10	RTU	20	1		
11,12	HEAT TRACE PANELS	20	1		
13	HATCHWAY LIGHT AND RECEPTACLE	20	1		
14	OBSTRUCTION LIGHT CONTROL PNL.	20	1		
15-18	SPARES	20	1		
19,20	SPACES	-	-		



POWER RISER DIAGRAM
N.T.S.



INSTRUMENTATION AND CONTROL RISER DIAGRAM
N.T.S.

SYMBOLS

	HOME RUN TO PANELBOARD. NO. OF ARROWS INDICATE NO. OF CIRCUITS, HASH MARKS INDICATE NO. OF #12 AWG. CONDUCTORS. NO HASH MARKS INDICATE 2" #12 CONDUCTORS.		OBSTRUCTION BEACON LIGHT
	CONDUIT CONCEALED IN WALL, IN SLAB ABOVE, OR ABOVE CEILING.		THERMOSTAT
	CONDUIT CONCEALED IN OR BELOW FLOOR OR UNDERGROUND.		LIQUID LEVEL SWITCH
	CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.		LEVEL ELEMENT
	FLEXIBLE CONDUIT WITH EQUIPMENT CONNECTION.		SOLENOID VALVE
	SERVICE OR EQUIPMENT GROUND.		LEVEL INDICATING TRANSMITTER
	ELECTRIC A.C. MOTOR, NO. INDICATES HORSEPOWER.		LIGHTING PANEL BOARD
	FUSE		LIGHTNING ARRESTOR
	MOLDED CASE CIRCUIT BREAKER		SURFACE MOUNTED LIGHTING FIXTURE
	JUNCTION BOX		EMERGENCY BATTERY PACK LIGHTING FIXTURE
	20A, 125V, 3W DUPLEX RECEPTACLE IN FLUSH OUTLET BOX, 18" ABOVE FINISHED FLOOR.		
	20A, 125V, 3W DUPLEX RECEPTACLE IN SURFACE OUTLET BOX, 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED.		
	SINGLE POLE SWITCH IN SURFACE OUTLET BOX, 48" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED (TYPICAL).		

ABBREVIATIONS

A	AMPERES	OH	OVERHEAD
AFF	ABOVE FINISHED FLOOR	P	POLE
DS	DOOR SWITCH	PNL	PANEL
GND	GROUND	RTU	REMOTE TELEMETRY UNIT
GFI	GROUND FAULT INTERRUPTER	S.S.	STAINLESS STEEL
HPS	HIGH PRESSURE SODIUM	TR	TRANSFORMER
LP	LIGHTING PANEL	TYP	TYPICAL
LTG	LIGHTING	V	VOLT
MFR	MANUFACTURER	W	WIRE OR WATT
NEC	NATIONAL ELECTRICAL CODE	WP	WEATHERPROOF
NO	NUMBER		

GENERAL NOTES

- DO NOT SCALE THE ELECTRICAL DRAWINGS REFER TO THE MECHANICAL, STRUCTURAL DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT.
- ALL WORK SHALL COMPLY WITH N.E.C. AND LOCAL CODES.
- CONDUCTORS SHALL NOT BE SPLICED EXCEPT AS NOTED IN SPECS.
- ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250-95 OF THE N.E.C. (UNLESS OTHERWISE NOTED).
- CONTRACTOR TO COORDINATE AND PAY FOR THE PROVISION OF THE 120/240V, 1Ø, 3W SERVICE, SEE SPECS.

RECORD DRAWING

These record drawings have been prepared based on information provided by others. The engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

CAMP DRESSER & McKEE Date: January 1999



DESIGNED BY: P. LEFAVE
DRAWN BY: J. CLARK
SHEET CHK'D BY: W. NELSON
CROSS CHK'D BY:
APPROVED BY: *[Signature]*
DATE: OCTOBER 1992

CAMP DRESSER & McKEE

environmental engineers, scientists, planners, & management consultants

CDM

PUBLIC WORKS COMMISSION
OF THE
CITY OF FAYETTEVILLE

CLINTON ROAD ELEVATED STORAGE TANK

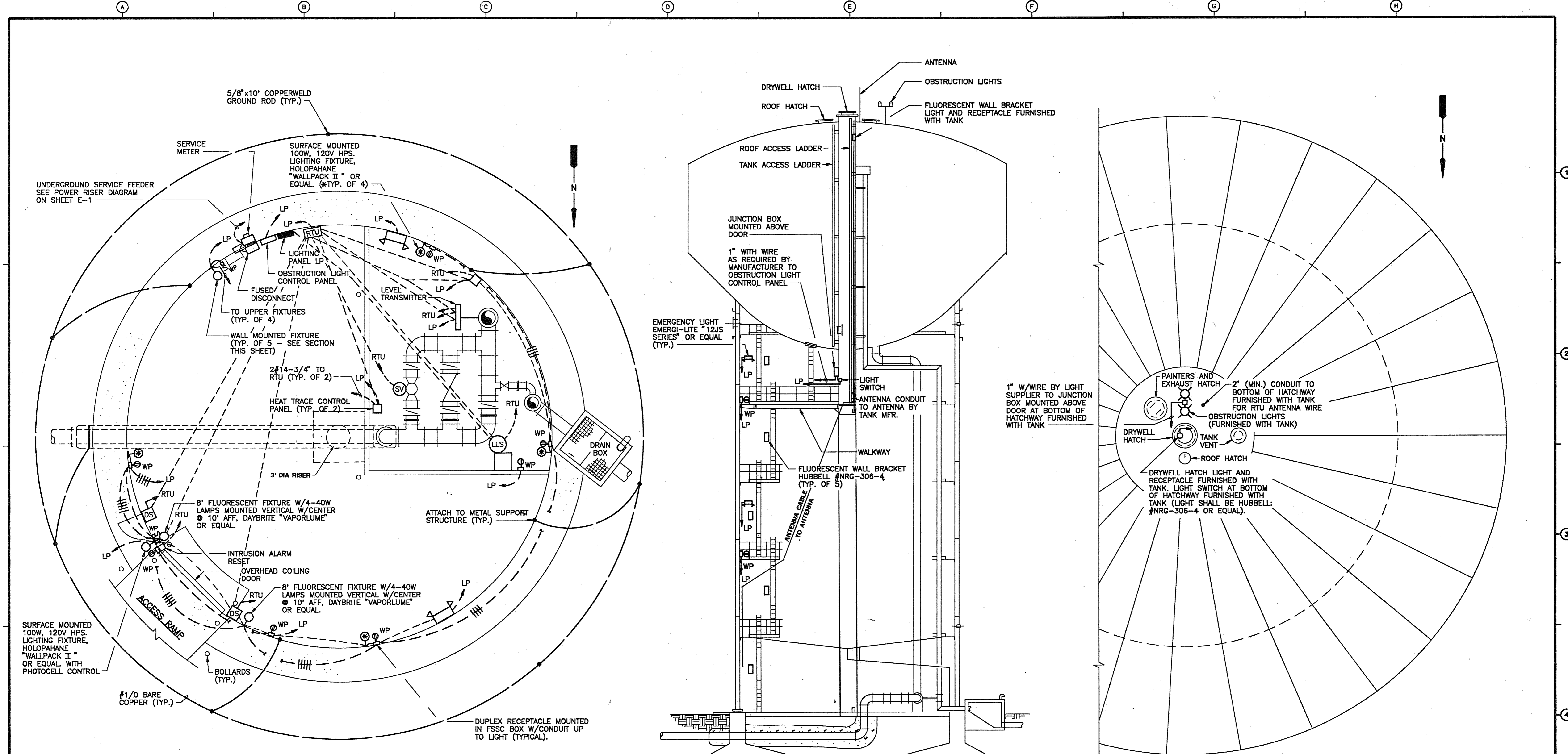
SITE PLAN, RISER DIAGRAM, SYMBOLS AND ABBREVIATIONS

PROJECT NO.
6384-5

SHEET NO.

E-1

DW-10511



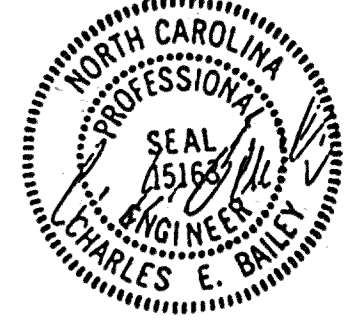
GROUND LEVEL PLAN
SCALE: 3/16"=1'-0"



SECTION
N.T.S.

ROOF PLAN
N.T.S.

NOTE:
TANK MANUFACTURER TO PROVIDE CONDUITS FROM WALKWAY TO HATCHWAY AND TOP OF TANK EQUIPMENT. CONTRACTOR TO COORDINATE AND CONTINUE CONDUITS AND PROVIDE JUNCTION BOXES, WIRING, ETC. FOR COMPLETE SYSTEM.

RECORD DRAWING
These record drawings have been prepared based on information provided by others. The engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.
CAMP DRESSER & MCKEE Date: January 1993



					DESIGNED BY: P. LEFAVE					CAMP DRESSER & McKEE					PUBLIC WORKS COMMISSION					PROJECT NO. 6384-5														
					DRAWN BY: J. CLARK										OF THE																			
					SHEET CHK'D BY: W. NELSON										CITY OF FAYETTEVILLE					STORAGE TANK ELECTRICAL PLAN					SHEET NO.									
					CROSS CHK'D BY:										CLINTON ROAD ELEVATED STORAGE TANK										E-2									
					APPROVED BY: 															environmental engineers, scientists planners, & management consultants														
					DATE: OCTOBER 1992																													
REV. NO.					DATE					DRWN					CHKD					REMARKS														
					1/95					TMB					KSH					RECORD DRAWING														

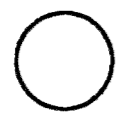
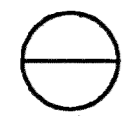


GENERAL INSTRUMENT OR FUNCTION SYMBOLS

PRIMARY LOCATION
NORMALLY ACCESSIBLE
TO OPERATOR

FIELD MOUNTED

DISCRETE
INSTRUMENTS

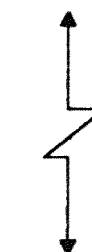


DIGITAL SYSTEM I/O INTERFACE. DIRECTION OF TRIANGLE DENOTES
WHETHER INPUT OR OUTPUT

LETTER DENOTES SIGNAL TYPE. THE LETTER "A" DENOTES AN ANALOG SIGNAL.
THE LETTER "D" DENOTES A DISCRETE SIGNAL



TIME DELAY RELAY (IN RTU SOFTWARE)



RADIO LINK

PROCESS DEVICE SYMBOLS

REGULATED SIDE
PRESSURE REGULATING VALVE
SELF CONTAINED

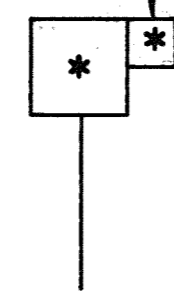
VALVE: GLOBE OR OTHER
IN-LINE TYPE NOT
OTHERWISE IDENTIFIED

BUTTERFLY VALVE

CHECK VALVE WITH
FLOW DIRECTION AS INDICATED

VALVE ACTUATOR SYMBOLS

AUTOMATIC POSITIONER
VALVE OR GATE ACTUATOR
WITH * DEFINED AS FOLLOWS:
S: SOLENOID



LINE SYMBOLS

MAJOR PROCESS PIPING, FLOW CHANNEL
OR DATA HIGHWAY WITH FLOW OR SIGNAL
DIRECTION AS SHOWN.

MINOR PROCESS PIPING WITH FLOW DIRECTION
AS SHOWN

MISCELLANEOUS PIPING WITH FLOW DIRECTION
AS SHOWN

ELECTRIC OR ELECTRONIC SIGNAL
WITH SIGNAL DIRECTION AS SHOWN

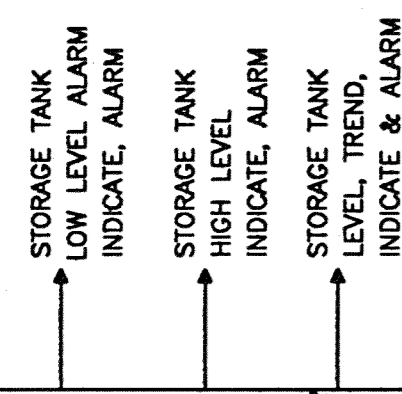
SOFTWARE SIGNAL LINK

ES----- ELECTRICAL SUPPLY

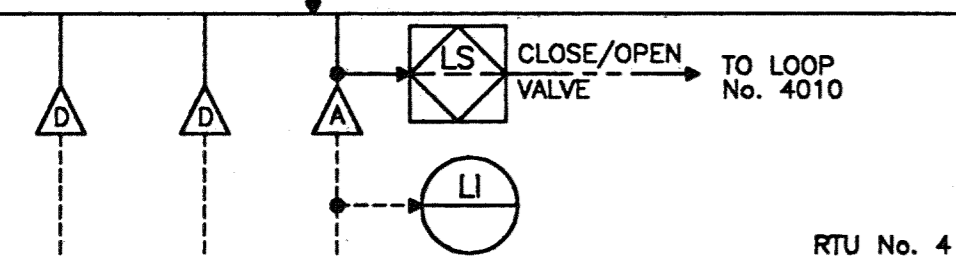
INSTRUMENTATION LEGEND SHEET

ITEM	DESCRIPTION	TYPE	CRITERIA	NAME TAG/SERVICE	QTY
LSL	LEVEL SWITCH LOW	PRESSURE SWITCH	LWL EL. 210 FT	CLINTON ROAD ELEVATED STORAGE TANK LEVEL LOW	1
LSH	LEVEL SWITCH HIGH	PRESSURE SWITCH	HWL EL. 240 FT	CLINTON ROAD ELEVATED STORAGE TANK LEVEL HIGH	1
LIT	LEVEL INDICATING TRANSMITTER	PRESSURE TYPE PROVIDE 105.5 FT SUPPRESSION	RANGE: 0-40 FT	CLINTON ROAD ELEVATED STORAGE TANK LEVEL	1
LI	LEVEL INDICATOR	ANALOG LEVEL INDICATOR W/ 4-20 mA INPUT	SCALE: 0-40 FT	CLINTON ROAD ELEVATED STORAGE TANK LEVEL	1
LS	CONTROL LEVEL SWITCH	SOFTWARE CURRENT SWITCH W/ ADJUSTABLE DEADBAND	N.O. CONTACT OUTPUT CLOSE CONTACT TO CLOSE VALVE	CLINTON ROAD FILL ALTITUDE VALVE CLOSE/OPEN	1

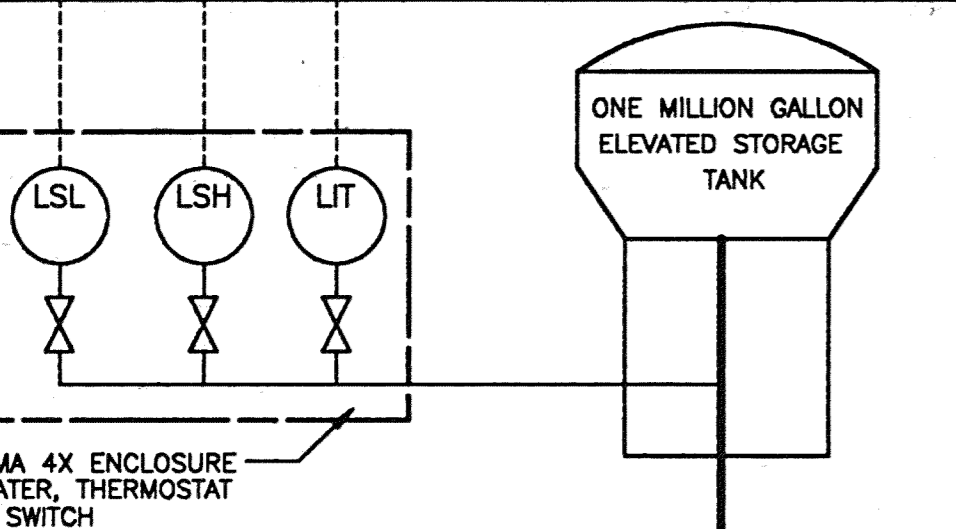
NOTE:
MOUNT TRANSMITTER AT EL. 102.5



CTU No. 1 & 2



RTU No. 4



CLINTON ROAD ELEVATED STORAGE TANK LEVEL

LOOP NO. 4000

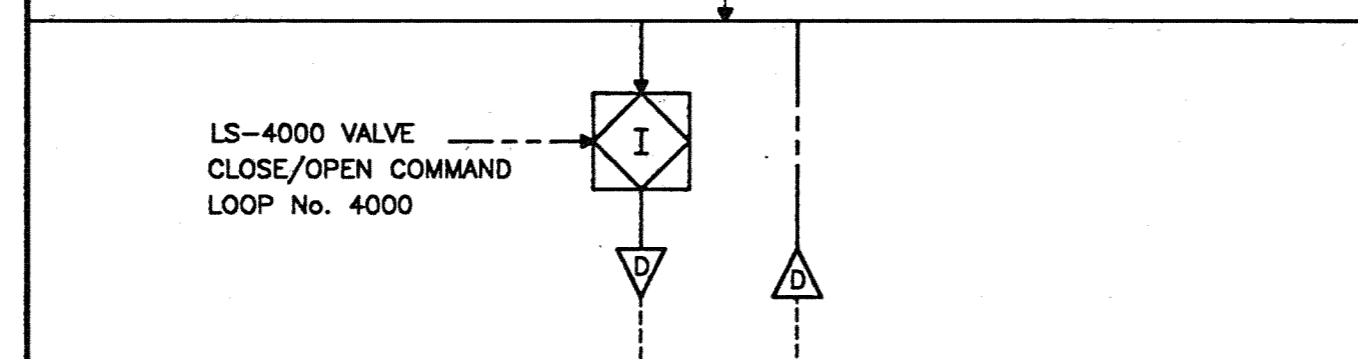
ITEM	DESCRIPTION	TYPE	CRITERIA	NAME TAG/SERVICE	QTY
PCV	PRESSURE CONTROL VALVE	(PROVIDED UNDER SECTION 15100)	SUPPLIED WITH SOLENOID OVERRIDE VALVE	CLINTON ROAD ALTITUDE FILL VALVE	1
ZS	POSITION SWITCH	LIMIT SWITCH	PROVIDED WITH ALTITUDE FILL VALVE	CLINTON ROAD ALTITUDE FILL VALVE	1

SOLENOID OVERRIDE VALVE IS ENERGIZED TO CLOSE & DE-ENERGIZED TO ALLOW
HYDRAULIC VALVE CONTROL.

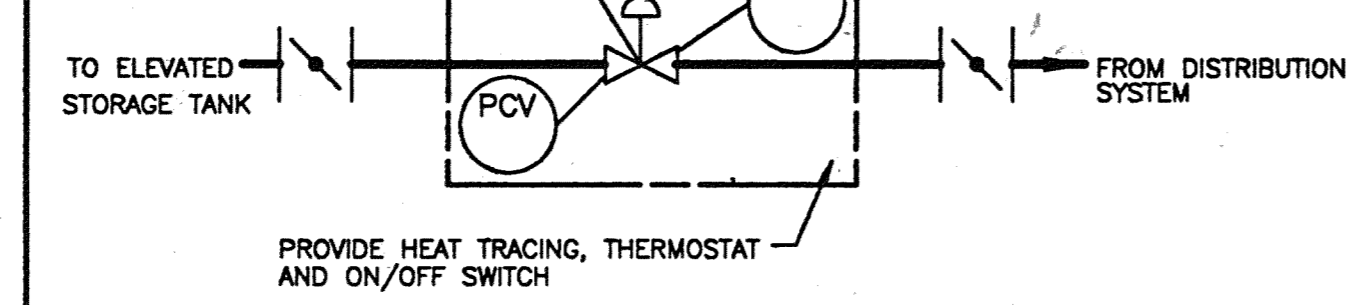
ENABLE/CLOSE VALVE

ALTITUDE VALVE STATUS

CTU No. 1 & 2



RTU No. 4



CLINTON ROAD
ELEVATED STORAGE TANK FILL ALTITUDE VALVE

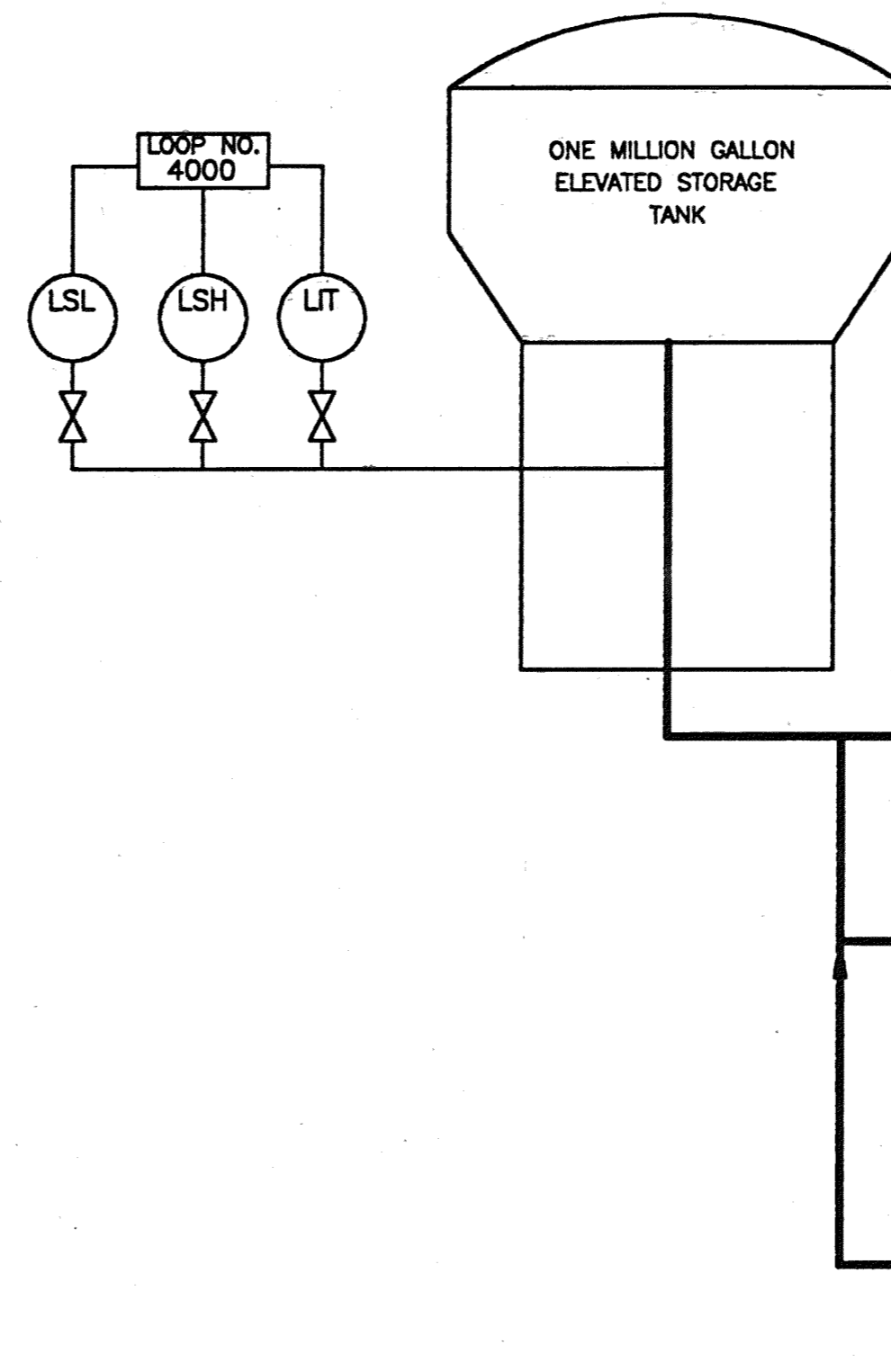
LOOP NO. 4010

DESIGNED BY: J. DAVIS
DRAWN BY: M. PALASICK
SHEET CHK'D BY: J. DAVIS
CROSS CHK'D BY: J. DAVIS
APPROVED BY: J. DAVIS
DATE: OCTOBER 1992

CAMP DRESSER & MCKEE

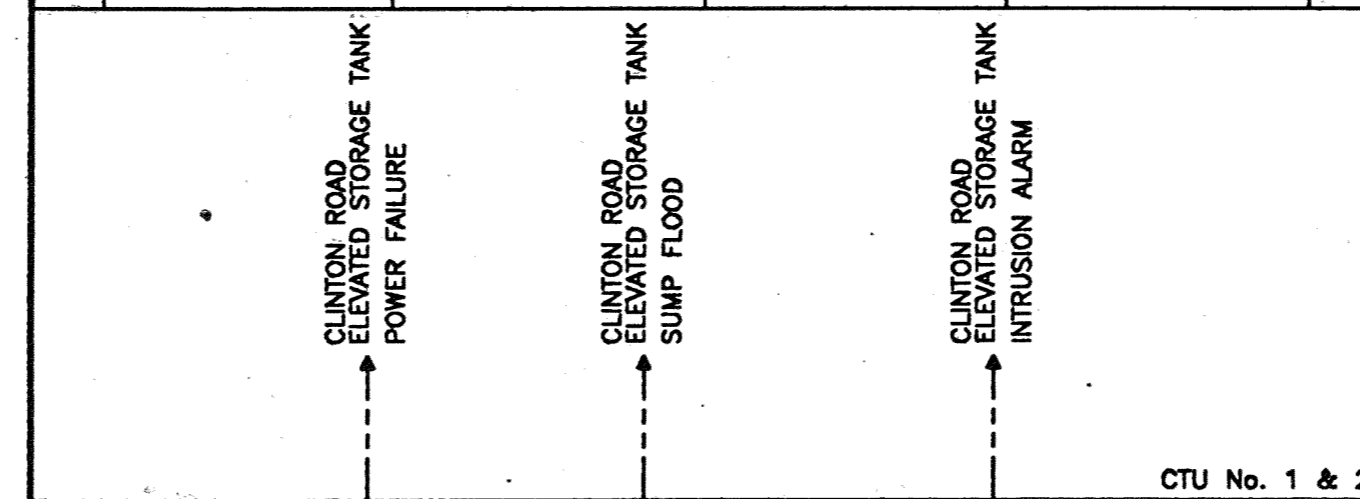
environmental engineers, scientists,
planners, & management consultants

CDM

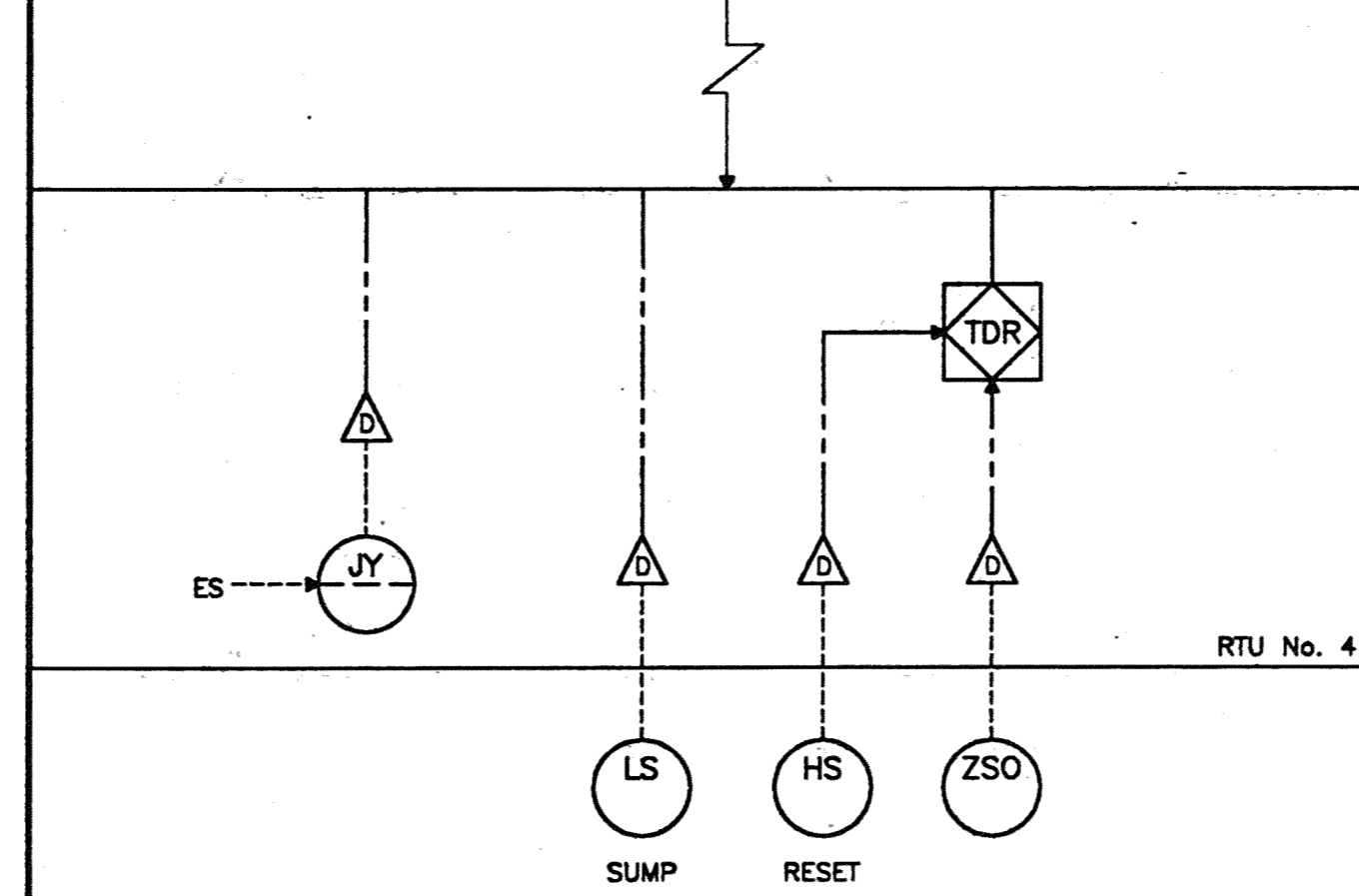


CLINTON ROAD ELEVATED STORAGE TANK PROCESS & INSTRUMENTATION DIAGRAM

ITEM	DESCRIPTION	TYPE	CRITERIA	NAME TAG/SERVICE	QTY
JY	POWER FAILURE RELAY	RELAY	NORMALLY CLOSED CONTACT	CLINTON ROAD ELEVATED STORAGE TANK POWER FAIL	1
LS	LEVEL SWITCH	MERCURY SWITCH		CLINTON ROAD ELEVATED STORAGE TANK SUMP FLOOD	1
ZSO	DOOR LIMIT SWITCH	(PROVIDED UNDER DIVISION 16)	LOCATE ON ALL ACCESS DOORS	CLINTON ROAD ELEVATED STORAGE TANK INTRUSION ALARM	2
HS	HAND SWITCH	PUSHBUTTON STATION	(PROVIDED UNDER DIVISION 16)	CLINTON ROAD ELEVATED STORAGE TANK INTRUSION ALARM RESET	1



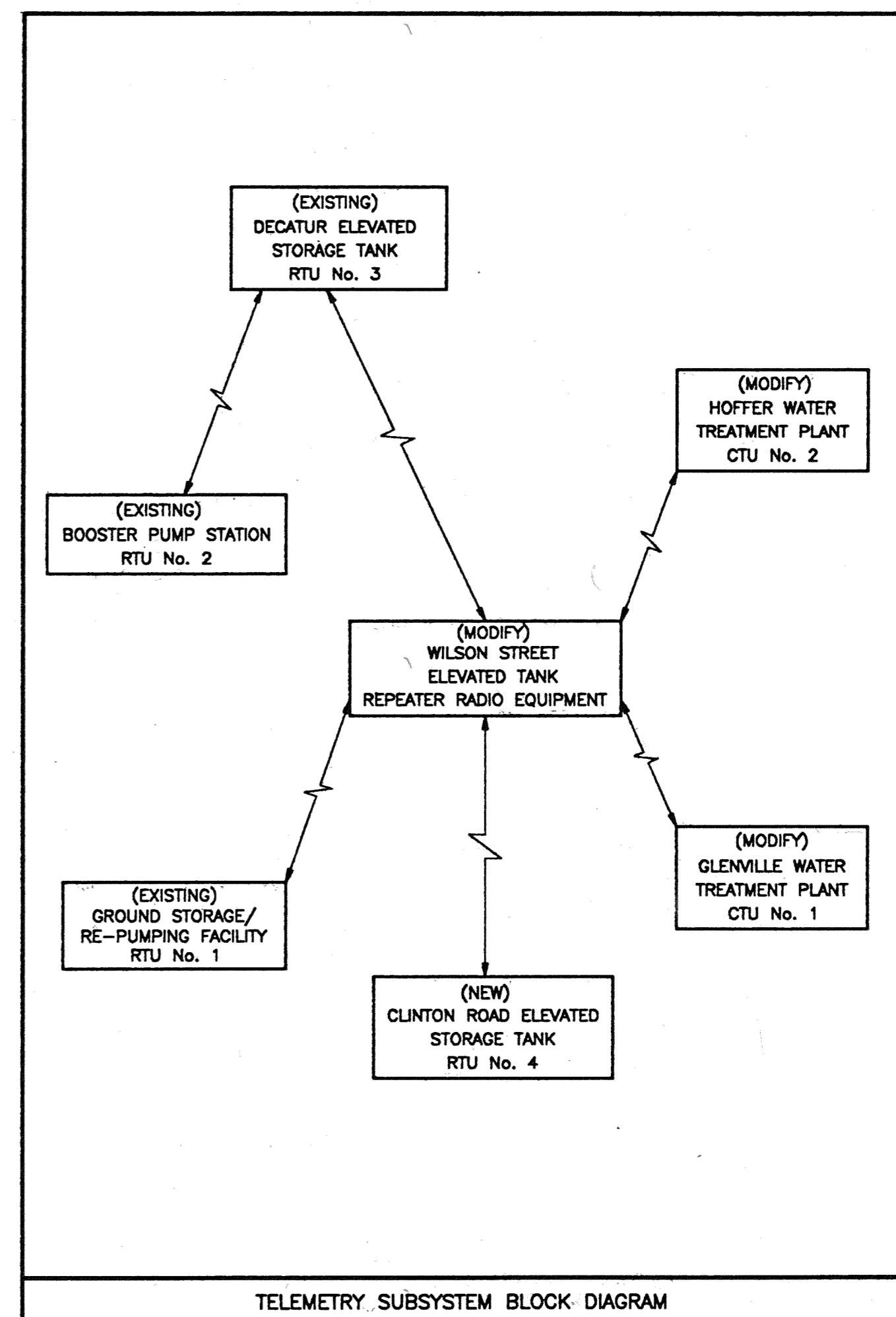
CTU No. 1 & 2



RTU No. 4

CLINTON ROAD
ELEVATED STORAGE TANK MISCELLANEOUS ALARMS

LOOP NO. 4020



TELEMETRY SUBSYSTEM BLOCK DIAGRAM

RECORD DRAWING
These record drawings have been prepared based
on information provided by others. The engineer
has not verified the accuracy of this information
and shall not be responsible for any errors or
omissions which may be incorporated herein as
a result.



REV. NO.	DATE	DRWN	CHKD	REMARKS
1/95		KSH		RECORD DRAWING

PUBLIC WORKS COMMISSION
OF THE
CITY OF FAYETTEVILLE

CLINTON ROAD ELEVATED STORAGE TANK

INSTRUMENTATION

PROJECT NO.
6384-5

SHEET NO.

I-1

DW-10511